Public Notice

US Army Corps of Engineers
Huntington District

In reply refer to:
Public Notice No. 200301393
Application No.: Greasy Creek

Issuance Date: January 7, 2004
Expiration Date: February 6, 2004

Address comments to: US Army Corps of Engineers, Huntington District
502 Eighth Street
ATTN: CELRH-F
Huntington, West Virginia 25701-2070

PUBLIC NOTICE

TO WHOM IT MAY CONCERN: The following application has been submitted for a Department of the Army Permit under the provisions of Section 404 of the Clean Water Act. This notice serves as the Corps of Engineers' request to the Kentucky Division of Water to act on Section 401 Water Quality Certification for the following application.

APPLICANT: Kentucky Transportation Cabinet
Department of Highways
State Office Building, 10th Floor
Frankfort, Kentucky 40622

LOCATION: The project is located in Greasy Creek, Gardiner Fork, Shop Branch, Snake Branch, Mays Branch, Wolfpit Branch, Left Fork of Wolfpit Branch, Marrowbone Creek, Laurel Branch, and their unnamed tributaries, near Yeager, Pike County, Kentucky.

DESCRIPTION: The applicant proposes to place fill material into waters of the United States in conjunction with the reconstruction of a portion of US-460. The project would include the placement of approximately six bridges, 20 culverts, the relocation or diversion of multiple streams and two waste sites. Bridge impacts total 0.30 acre, the waste sites would impact 8,673 linear feet or 1.32 acres of ephemeral, intermittent and perennial streams, stream diversions or relocations would impact approximately 9,800 linear feet or 1.15 acres of jurisdictional streams and culverts would impact 0.519 acre of waters of the United States. Detailed descriptions of impacts are listed in Attachment A.

In order to compensate for stream impacts, the applicant has proposed to pay in-lieu fee to the Kentucky Department of Fish and Wildlife Stream Restoration Fund in the amount of $3,712,139.61. The calculated amount was based on the Eastern Kentucky Protocol. The applicant stated that on-site mitigation for this project is very limited due to constricted right-of-way limits within the project area and steep terrain throughout the site. However, the Cabinet proposes to explore on-site mitigation, especially in the areas of the excess material spoil sites, sometime near the end of the construction when the actual impacts can be determined. The applicant also requested that the payment of the initially determined in-lieu fee be deferred until such time that any acceptable on-site mitigation can be determined. The full amount of the initial in-lieu fee determination would be obligated until then, as a "worse case" situation.

Plans of the proposed work are attached to this notice.

A Section 401 Water Quality Certification is required for this project. It is the applicant's responsibility to obtain certification from the Kentucky Division of Water.

The National Register of Historic Places has been consulted and it has been determined there are no properties currently listed on the register in the area affected by the proposed project. A copy of this public notice will be sent to the State Historic Preservation Office for their review. Comments concerning archeological sensitivity of a project area should be based upon collected data.

The Huntington District has consulted the most recently available information and has determined the project is not likely to affect the continued existence of any endangered species or threatened species, or result in the destruction or adverse modification of habitat of such species which has been determined to be critical. This public notice serves as a request to the U.S. Fish and Wildlife Service for any additional information they may have on whether any listed or proposed to be listed endangered or threatened species may be present in the area which would be affected by the activity, pursuant to Section 7(c) of the Endangered Species Act of 1972 (as amended).

Any person who has an interest which may be adversely affected by the issuance of a permit may request a public hearing. The request must be submitted in writing to the District Engineer on or before the expiration date of this notice and must clearly set forth the interest which may be adversely affected by the activity and the manner in which the interest may be adversely affected by this activity.

Interested parties are invited to state any objections they may have to the proposed work. The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people. In addition, the evaluation of the impact of the activity on the public interest will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency, under the authority of Section 404(b) of the Clean Water Act. Written statements on these factors received in this office on or before the expiration date of this public notice will become a part of the record and will be considered in the final determination. A permit will be granted unless its issuance is found to be contrary to the public interest.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above.

Persons wishing to submit comments, objections or requests for public hearings concerning the Corps of Engineers permit should write:

U.S. Army Corps of Engineers
ATTN: CELRH-OR-F Public Notice No. 200301393
502 Eighth Street
Huntington, West Virginia 25701-2070

If you have any questions concerning this public notice, please call Mrs. Sarah M. Workman of the South Regulatory Section at 304-399-5710.

for Ginger Mullins, Chief
Regulatory Branch

(K)

Attachment A

SUMMARY OF SECTION 404 IMPACTS

US 460, Sections 3, 4, and 5
Pike County, Kentucky

The *Eastern Kentucky Stream Assessment Protocol* was used to assess stream impacts that will result from the project. The following is a summary of stream impacts. On-site mitigation for this project is very limited partly due to constricted right-of-way within the project area but mainly due to the very steep terrain throughout the project. Therefore, mitigation for these impacts will be in the form of an in-lieu fee payment to the Kentucky Division of Fish and Wildlife Resources. The Stream Assessment Report for the project includes calculations of the proposed in-lieu fee based on the *In-Lieu Fee Compensatory Mitigation Calculator (version 2002.8)*.

Bridges and Culverts:

1. Sta. 312+50 to Sta. 319+55 – Construct a six-span dual bridge, 715 ft. (218 m) in length with five piers that span Greasy Creek for traffic flowing eastbound on US 460 (**Sheet 1**). No channel work is proposed on the stream. One pier is below normal pool height. The impact to waters is 0.03 acres (0.012 ha). If a temporary crossing is needed during construction, it will be the responsibility of the contractor to apply for approval.

2. Sta. 312+50 to Sta. 320+05 – Construct a six-span dual bridge, 761 ft. (232 m) in length with five piers that span Greasy Creek for traffic flowing westbound on US 460 (**Sheet 1**). No channel work is proposed on the stream. Two piers are below normal pool height. The impact to waters is 0.07 acres (0.028 ha). If a temporary crossing is needed during construction, it will be the responsibility of the contractor to apply for approval.

3. Sta. 327+45 to Sta. 335+10 – Construct a seven-span bridge, 765 ft. (233 m) in length with six piers that span Gardiner Fork for traffic flowing eastbound on US 460 (**Sheet 2**). No channel work is proposed on the stream. Two piers are below normal pool height. The impact to waters is 0.07 acres (0.028 ha). If a temporary crossing is needed during construction, it will be the responsibility of the contractor to apply for approval.

4. Sta. 325+90 to Sta. 334+00 – Construct an eight-span bridge, 810 ft. (247 m) in length with seven piers that span Gardiner Fork for traffic flowing westbound on US 460 (**Sheet 2**). No channel work is proposed on the stream. Two piers are below normal pool height. The impact to waters is 0.07 acres (0.028 ha). If a temporary crossing is needed during construction, it will be the responsibility of the contractor to apply for approval.

5. Sta. 344+68.27 to Sta. 349+01.73 – Construct a four-span bridge 408 ft. (124 m) in length with three piers that span Shop Branch for traffic flowing eastbound on US 460 (**Sheet 3**). No channel work is proposed on the stream. One pier is below normal pool height. The impact to waters is 0.03 acres (0.012 ha). If a temporary crossing is needed during construction, it will be the responsibility of the contractor to apply for approval.

6. Sta. 344+65.50 to Sta. 348+76.50 – Construct a three-span bridge 408 ft. (124 m) in length with two piers that span Shop Branch for traffic flowing westbound on US 460 (**Sheet 3**). No channel work is proposed on the stream. One pier is below normal pool height. The impact to waters is 0.03 acres (0.012 ha). If a temporary crossing is needed during construction, it will be the responsibility of the contractor to apply for approval.

7. Sta. 355+00 to Sta. 382+50 – Flow from Snake Branch consisting of 1,952 ft. (595 m) of intermittent stream and 556 ft. (169 m) of ephemeral streams will be diverted into flat bottom ditches. The

watershed for Snake Branch is approximately 137 acres (55.4 ha). Impact to waters is 0.24 acres (0.097 ha) and 0.04 acres (0.016 ha), respectively.

8. Sta. 362+00 – Construct a 36 in. (900 mm) pipe culvert 201 ft. (61 m) in length with 42 ft. (13 m) of inlet and 108 ft. (33 m) of outlet channel design (**Sheet 4 and 5**). This impacts 363 ft. (111 m) of existing stream. Field investigations indicate this is ephemeral in nature and is an unnamed tributary of Snake Branch, with a watershed of 16 acres (6.5 ha). The impact to waters of the U.S. is 0.01 acres (0.004 ha).

9. Sta. 371+00 – Construct a 60 in. (1500 mm) pipe culvert 173 ft. (53 m) in length with 5 ft. (1.5 m) of inlet and 27 ft. (8.2 m) of outlet channel design (**Sheet 6 and 7**). This impacts 1,381 ft. (421 m) of existing stream. Field investigations indicate this drainage is ephemeral in nature and is the headwaters of Snake Branch, with a watershed area of 47 acres (19 ha). The impact to waters of the U.S. is 0.02 acres (0.008 ha).

10. Right of Sta. 380+00 – construct a 30 in. (750 mm) pipe culvert 164 ft. (50 m) in length to median DBI at Sta. 378+50 (**Sheet 8 and 9**). This impacts 60 ft. (18 m) of existing stream. Field investigations indicate this drainage is ephemeral in nature with a watershed of 4.0 acres (1.6 ha). The impact to waters of the U.S. is 0.009 acres (0.004 ha). Sta. 378+50 connects to Sta. 372+50 where drainage is outlet with the construction of a 32 in. (800 mm) pipe culvert 82 ft. (25 m) in length with 2 ft. (0.6 m) of outlet channel design.

11. Sta. 395+00 (45° Skew Right) – Construct a 54 in. (1350 mm) pipe culvert 354 ft. (108 m) in length with 26 ft. (8 m) of inlet channel design (**Sheet 11 and 14**). This impacts 1,450 ft. (442 m) of existing stream. Field investigations indicate this drainage is ephemeral in nature and is an unnamed tributary of Mays Branch, with a watershed of 46 acres (18.6 ha). The impact to waters is 0.04 acres (0.02 ha).

12. Sta. 403+88 to Sta. 409+00 – Construct a five-span bridge, 510 ft. (155 m) in length with four piers that span Mays Branch and Wolfpit for traffic flowing eastbound on US 460 (**Sheet 15**). All of the bridge piers were designed to be above the normal pool height of the water with no channel work proposed on the stream. No permanent impacts to water are expected. If a temporary crossing is needed during construction, it will be the responsibility of the contractor to apply for approval.

13. Sta. 403+88 to Sta. 409+51 – Construct a six-span bridge 560 ft. (171 m) in length with five piers that span Mays Branch and Wolfpit for traffic flowing westbound on US 460 (**Sheet 15**). All of the bridge piers were designed to be above the normal pool height of the water with no channel work proposed on the stream. No permanent impacts to water are expected. If a temporary crossing is needed during construction, it will be the responsibility of the contractor to apply for approval.

14. Sta. 405+00/Ramp A Sta. 86+50 Wolfpit Bridge – Construct a 12 ft. (3.7 m) by 3 ft. (0.9 m) RCBC, 39 ft. (12 m) in length with 55 ft. (17 m) of outlet channel improvements. (**Sheet 15 and 17**). The watershed is 153 acres (61.9 ha). This impacts 1,821 ft. (555 m) of intermittent stream (Mays Branch) that is redirected into flat bottom ditches along the new Mays Branch Road. Impact to waters is 0.006 acres (0.002 ha).

15. Sta. 435+75 – Construct a 8 ft. (2.4 m) by 4 ft. (1.2 m) RCBC, 170 ft. (52 m) in length with 32 ft. (10 m) of inlet channel improvements and 167 ft. (51 m) of outlet channel improvements (**Sheet 18 and 19**). This impacts 342 ft. (104 m) of existing stream. Field investigations indicate this is an intermittent stream and an unnamed tributary of Wolfpit Branch with a watershed of 147 acres (59.5 ha). The impact to waters is 0.03 acres (0.01 ha).

16. Sta. 461+95 – Construct a 24 in. (600 mm) pipe culvert 62 ft. (19 m) in length that joins with a median box inlet (**Sheet 20 and 21**). This impacts 295 ft. (90 m) of existing stream. Field investigations indicate this stream is ephemeral in nature and is an unnamed tributary to Wolfpit Branch with a watershed of 4.0 acres (1.6 ha). This ephemeral drainage is combined with median drainage that is

outlet to the left in a 54 in. (1350 mm) pipe 62 ft. (19 m) in length with 115 ft. (35 m) of outlet channel improvements. The combined impact to waters is 0.009 (0.004 ha).

17. For Wolfpit Branch, 720 ft. (219 m) of its' existing streams are filled in and the flow is diverted into side ditches. Field investigations indicate these streams are ephemeral in nature. The combined watershed is approximately 14 acres (5.7 ha) and the impact to waters is 0.04 acres (0.02 ha).

18. Sta. 475+50 – Construct a 8 ft. (2.4 m) by 6 ft. (1.8 m) RCBC, 234 ft. (71 m) in length with 77 ft. (23 m) of inlet channel improvements and 334 ft. (102 m) of outlet channel improvements (**Sheet 22 and 26**). This impacts 7,222 ft. (2201 m) of existing stream in the Left Fork of Wolfpit Branch. The watershed is 415 acres (167.9 ha) and the impact to waters is 0.09 acres (0.04 ha).

19. Ramp A Sta. 62+50.85 (11° 25'02" Skew Left) – Construct a 42 in. (1050 mm) pipe culvert 201 ft. (61 m) in length with 20 ft. (6 m) of inlet channel improvements and 490 ft. (149 m) of outlet channel improvements (**Sheet 27 and 29**). This impacts 1,977 ft. (603 m) of existing stream. Field investigations indicate this is an intermittent stream and an unnamed tributary of Marrowbone Creek. The watershed is 48 acres (19.4 ha) and the impact to waters is 0.02 acres (0.008 ha). This pipe connects with Sta. 64+65.12 and runs into a 48 in. (1200 mm) pipe 600 ft. (183 m) in length before being outlet into a flat bottom ditch. Impact to waters from the 48 in. (1200 mm) pipe is 0.06 acres (0.02 ha).

20. Ramp A Sta. 64+65.12 (24° 52'20" Skew Right) – Construct a 48 in. (1200 mm) pipe culvert 226 ft. (69 m) in length with 35 ft. (11 m) of inlet channel improvements (**Sheet 27 and 30**). This impacts 685 ft. (209 m) of existing stream. Field investigations indicate this is ephemeral in nature and an unnamed tributary of Marrowbone Creek. The watershed is 47 acres (19.0 ha) and the impact to waters is 0.02 acres (0.008 ha).

21. Ramp A Sta. 72+00 – Construct a 30 in. (750 mm) pipe culvert 96 ft. (29 m) in length with 50 ft. (15 m) of outlet channel improvements (**Sheet 27 and 31**). This impacts 383 ft. (117 m) of existing stream. Field investigations indicate this is ephemeral in nature and an unnamed tributary of Marrowbone Creek. The watershed is 8 acres (3.2 ha) and the impact to waters is 0.006 acres (0.002 ha).

22. Ramp A Sta. 78+55 – Construct a 42 in. (1050 mm) pipe culvert 102 ft. (31 m) in length with 67 ft. (20 m) of outlet channel improvements (**Sheet 28 and 32**). This impacts 832 ft. (254 m) of existing stream. Field investigations indicate this is ephemeral in nature and an unnamed tributary of Marrowbone Creek. The watershed is 16 acres (6.5 ha) and the impact to waters is 0.008 acres (0.003 ha).

23. Sta. 32+35 KY 195 – Construct a 12 ft. (3.7 m) by 4 ft. (1.2 m) RCBC 74 ft. (23 m) in length with 50 ft. (15 m) of inlet channel improvements and 158 ft. (48 m) of outlet channel improvements (**Sheet 33 and 34**). This impacts 324 ft. (99 m) of existing stream. Field investigations indicate this is an intermittent stream and an unnamed tributary of Marrowbone Creek. The watershed is 188 acres (76.1 ha) and the impact to waters is 0.03 acres (0.01 ha).

24. Ramp A Sta. 95+08.50 to Sta. 98+81.50 – Construct a four-span bridge, which is a ramp to KY 195, over Marrowbone Creek (**Sheet 33**). The bridge will be 370 ft. (113 m) in length and will have three piers. All of the bridge piers were designed to be above the normal pool height of the water with no channel work proposed on the stream. Fill for Abutment 1 will be above ordinary high water but is outside of the Floodway. Piers 1 and 2 are in the Floodplain and within the Floodway. No permanent impacts to water are expected. If a temporary crossing is needed during construction, it will be the responsibility of the contractor to apply for approval.

25. Sta. 527+00 – Construct a 54 in. (1350 mm) pipe culvert 411 ft. (125 m) in length with 46 ft. (14 m) of inlet channel improvements and 450 ft. (137 m) of outlet channel improvements (**Sheet 35 and 36**). This impacts 772 ft. (235 m) of existing stream. Field investigations indicate this is ephemeral in

nature and an unnamed tributary of Marrowbone Creek. The watershed is 58 acres (23.5 ha) and the impact to waters is 0.04 acres (0.02 ha).

26. Sta. 530+82 to Sta. 541+93 – Construct a nine-span bridge 1,105 ft. (336.8 m) in length with eight piers that span Marrowbone Creek and KY 195 for traffic flowing eastbound on US 460 (**Sheet 37**). All of the bridge piers were designed to be above the normal pool height of the water with no channel work proposed on the stream. There is no fill below ordinary high water and no permanent impacts to water are expected even though Pier 3 is partially within the Floodplain and partially within the Floodway. If a temporary crossing is needed during construction, it will be the responsibility of the contractor to apply for approval.

27. Sta. 530+18 to Sta. 541+28 – Construct a nine-span bridge 1,104 ft. (336.5 m) in length with eight piers that span Marrowbone Creek and KY 195 for traffic flowing westbound on US 460 (**Sheet 37**). All of the bridge piers were designed to be above the normal pool height of the water with no channel work proposed on the stream. There is no fill below ordinary high water and no permanent impacts to water are expected even though Pier 3 is partially within the Floodplain and partially within the Floodway. If a temporary crossing is needed during construction, it will be the responsibility of the contractor to apply for approval.

28. Sta. 551+00 – Construct a 42 in. (1050 mm) pipe culvert, 421 ft. (128 m) in length with 42 ft. (13 m) of inlet channel and 20 ft. (6 m) of outlet channel improvements (**Sheet 38 and 39**). This impacts 502 ft. (153 m) of existing stream. Field investigations indicate this is ephemeral in nature and an unnamed tributary of Laurel Branch. The watershed is 44 acres (17.8 ha) and the impacts to waters is 0.03 acres (0.01 ha).

29. Sta. 557+35 – Construct a 36 in. (900 mm) pipe culvert, 277 ft. (84 m) in length with 26 ft. (8 m) of inlet channel and 34 ft. (10 m) of outlet channel improvements (**Sheet 40 and 41**). This impacts 255 ft. (78 m) of existing stream. Field investigations indicate this is ephemeral in nature and is an unnamed tributary to Laurel Branch, with a watershed of 15 acres (6.1 ha). The impact to waters is 0.02 acres (0.008 ha).

30. Sta. 567+50 – Construct a 60 in. (1500 mm) pipe culvert, 224 ft. (68 m) in length with 15 ft. (4.5) of inlet channel improvements and 23 ft. (7 m) of outlet channel improvements (**Sheet 42, 43, and 45**). This impacts 1,081 ft. (329 m) of existing stream. Field investigations indicate this is an intermittent stream that is a tributary to Laurel Branch, with a watershed of 93 acres (37.6 ha). The impact to waters is 0.03 acres (0.01 ha).

31. Left of. Sta. 569+00/Entrance Sta. 1+17 – Construct a 30 in. (750 mm) pipe culvert, 168 ft. (51 m) in length with 18 ft. (5.4 m) of outlet channel improvements (**Sheet 43 and 46**). The watershed is 15 acres (6.1 ha) and combines with drainage to Sta. 567+50. Field investigations indicate this is an intermittent stream that is a tributary of Laurel Branch. The impact to waters is 0.01 acres (0.004 ha).

32. Sta. 575+75 (Skew Right 40°)– Construct a 48 in. (1200 mm) pipe culvert, 210 ft. (64 m) in length with 100 ft. (30 m) of inlet channel improvements and 12 ft. (3.7 m) of outlet channel improvements (**Sheet 47 and 48**). This impacts 317 ft. (97 m) of existing stream. Field investigations indicate this is ephemeral in nature and is a tributary to Laurel Branch, with a watershed of 36 acres (14.6 ha). The impact to waters is 0.02 acres (0.008 ha).

33. Sta. 587+00 – Construct a 42 in. (1050 mm) pipe culvert 80 ft. (24 m) in length (**Sheet 49 and 52**). This impacts 614 ft. (187 m) of existing stream. Field investigations indicate this is an ephemeral stream that is a tributary to Laurel Branch, with a watershed of 24 acres (9.7 ha). The impact to waters is 0.006 acres (0.002 ha).

34. Sta. 588+43 – Construct a 36 in. (900 mm) pipe culvert 79 ft. (24 m) in length (**Sheet 49 and 53**). This impacts 799 ft. (244 m) of existing stream. Field investigations indicate this is an ephemeral

stream that is a tributary to Laurel Branch, with a watershed of 13 acres (5.3 ha). The impact to waters is 0.005 acres (0.002 ha).

35. Sta. 546+00 to 587+00 – Laurel Branch is redirected into flat bottom ditches before entering Marrowbone Creek. This impacts 4,432 ft. (1,351 m) of intermittent stream and 1,371 ft. (418 m) of ephemeral stream. The watershed for Laurel Branch is approximately 354 acres (143.3 ha). Impacts to waters are 0.53 acres (0.2 ha) and 0.08 acres (0.03 ha), respectively.

Channel Change:

1. Sta. 473+80 to Sta. 483+50 – Relocate 853 ft. (260 m) of Wolfpit Branch (**Sheet 23**). The proposed channel will be 834 ft. (254 m) in length. The drainage area is 1,632 acres (660.4 ha). The impact to waters is 0.22 acres (0.09 ha).

Waste Site:

1. Rt. Sta. 395+00 – the valley of an unnamed tributary of Mays Branch will be filled in with waste materials (rock and soil) generated by the construction of US 460 (**Sheet 11 and 12**). This will result in the filling of 1,450 ft. (442 m) of ephemeral streams. The impact to waters is 0.09 acres (0.04 ha).

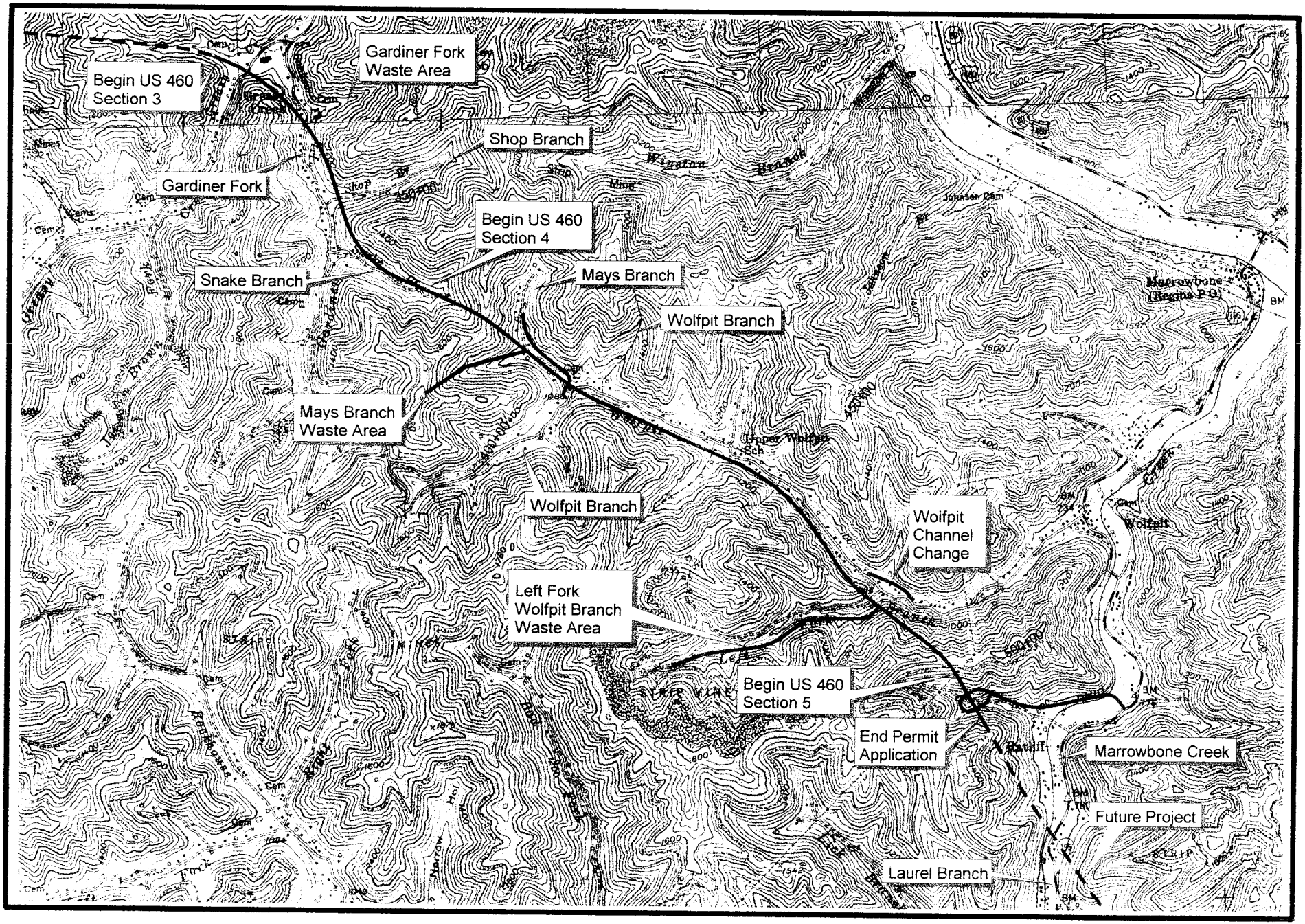
2. Sta. 475+50 – the valley of the Left Fork of Wolfpit Branch will be filled with waste materials (rock and soil) generated by the construction of US 460 (**Sheet 23, 24, and 25**). This will result in the filling of 3,950 ft. (1,204 m) of perennial stream, 234 ft. (71 m) of intermittent stream, and 3,039 ft. (926 m) of ephemeral stream. The impact to waters is 1.23 acres (0.5 ha).

SUMMARY OF STREAM IMPACTS

STRUCTURE	LENGTH		WATERSHED		IMPACT TO WATERS OF THE U.S.	
	Feet	Hectares	Acres	Hectares	Acres	Hectares
Sta. 316+00, Greasy Creek Bridge Two structures- 1 EB and 1WB	EB-715 WB-761	EB-218 WB-232	2259	914.2	0.03 0.07	0.012 0.028
Sta. 325+00, Gardiner Fork Bridge Two structures- 1 EB and 1WB	EB-765 WB-810	EB-233 WB-247	792	320.5	0.07 0.07	0.028 0.028
Sta. 344+68.27, Shop Branch Bridge Two structures- 1 EB and 1WB	EB-408 WB-408	EB-124 WB-124	184	74.5	0.03 0.03	0.012 0.012
Sta. 355+00 to 382+50 Diversion of Snake Branch Creek	Int.-1952 Eph-556	EB-595 WB-169	137	55.4	0.24 0.04	0.097 0.016
Sta. 362+00, Culvert	201	61	16	6.5	0.01	0.004
Sta. 371+00, Culvert	173	53	47	19	0.02	0.008

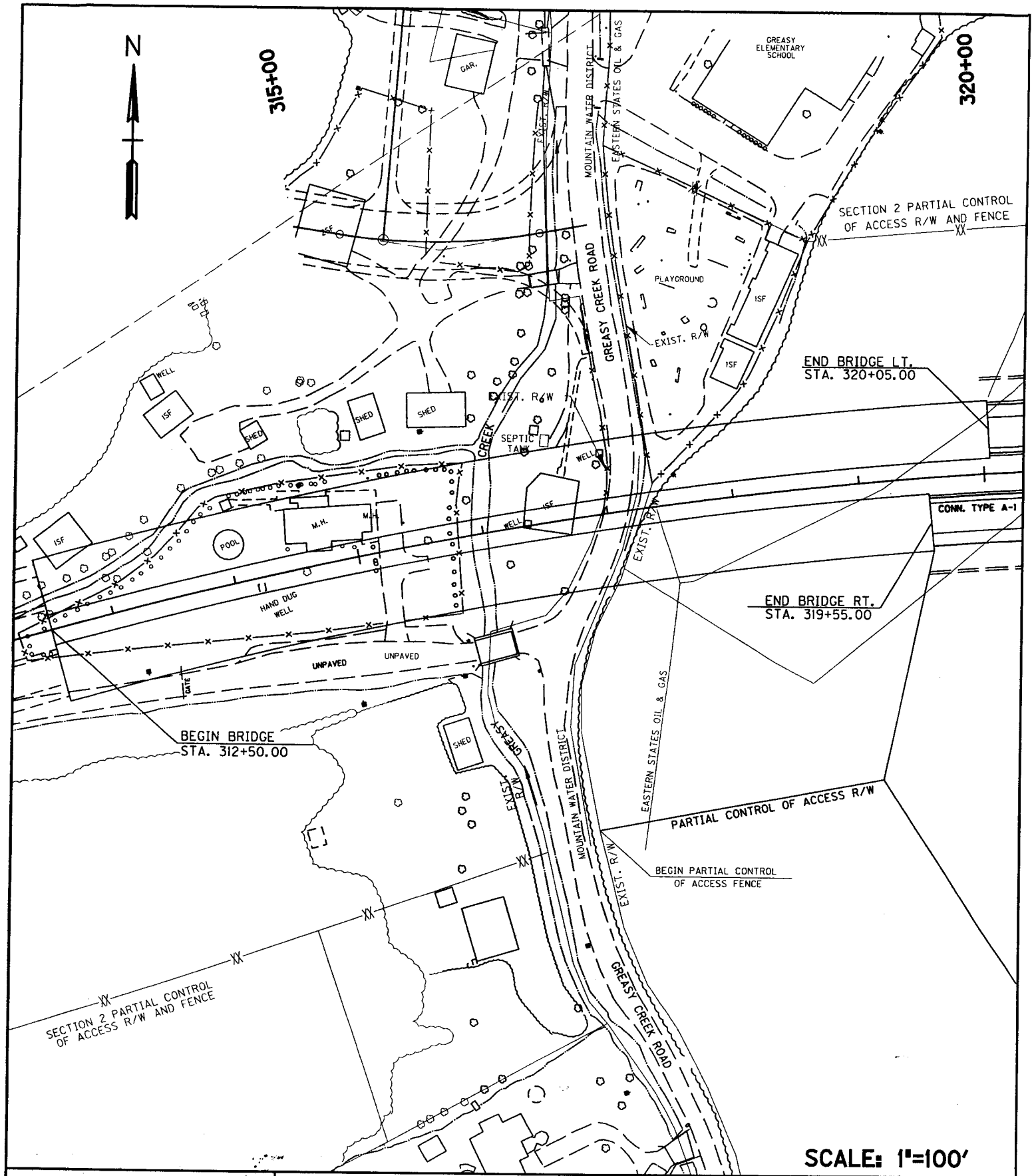
Sta. 380+00, Culvert DBI RT that goes to median	164	50	4	1.6	.009	0.004
Sta. 395+00, Culvert	354	108	46	18.6	0.04	0.02
Sta. 403+88, Wolfpit Bridge Two structures- 1 EB and 1WB	EB-510 WB-560	EB-155 WB-171	390	157.8	--	--
Sta. 405+00/Sta. 86+50 Mays Branch Rd., Box Culvert	39	12	153	61.9	0.006	0.002
Sta. 435+75, RCBC	170	52	147	59.5	0.03	0.01
Sta. 461+95, Culvert	62	19	4	1.6	0.009	0.004
Tributaries of Wolfpit Diversion of ephemerals	Eph- 720	Eph-219	14	5.7	0.04	0.02
Sta. 475+50, RCBC	234	71	415	167.9	0.09	0.04
Ramp A Sta. 62+51, Culvert	201	61	48	19	0.08	0.008
Ramp A Sta. 64+65, Culvert	226	69	47	19.0	0.02	0.008
Ramp A Sta. 72+00, Culvert	96	29	8	3.2	0.006	0.002
Ramp A Sta. 78+55, Culvert	102	31	16	6.5	0.008	0.003
Sta. 32+35, RCBC on KY 195	74	23	188	76.1	0.03	0.01
Sta. 95+08.50 Ramp A Bridge	370	113	14720	5957	--	--
Sta. 527+00, Culvert	411	125	58	23.5	0.04	0.02
Sta. 530+82 and Sta. 530+18 KY 195 & Marrowbone Bridge	EB-1105 WB-1104	EB-336.8 WB-336.5	14720	5957	--	--
Sta. 551+00, Culvert	421	128	44	17.8	0.03	0.01
Sta. 557+35, Culvert	277	84	15	6.1	0.02	0.008
Sta. 567+50, Culvert	224	68	93	37.6	0.03	0.01
Sta. 569+00/Entrance Sta. 1+17, Culvert	168	51	15	6.1	0.01	0.004
Sta. 575+75, Culvert	210	64	36	14.6	0.02	0.008
Sta. 587+00, Culvert	80	24	24	9.7	0.006	0.002

Sta. 588+43, Culvert	79	24	13	5.3	0.005	0.002
Sta. 546+00 to Sta. 587+00 Diversion of Laurel Branch	Int-4432 Eph-1371	Int-1351 Eph-418	354	143.3	0.53 0.08	0.2 0.03
Channel Change – Sta. 473+80 Wolfpit	834	254	1632	660.4	0.22	0.09
Waste Site – Sta. 395+00 Mays Branch	Eph-1450	Eph-442	46	18.6	.09	0.04
Waste Site – Sta. 475+50 Left Fork of Wolfpit Branch	Per-3950 Int-234 Eph-3039	Per-1204 Int-71 Eph-926	415	167.9	1.23	0.5



Project Location Map

US 460 Sections 3, 4, & 5
Permit Application
Pike County, Kentucky



~NOTES~

APPLICATION BY

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
DIVISION OF
ENVIRONMENTAL ANALYSIS

Greasy Creek Bridge, Begin Station 312+50
PROPOSED ACTIVITIES:

Greasy Creek
STREAM NAME:

AT OR NEAR:

Pike
COUNTY OF:

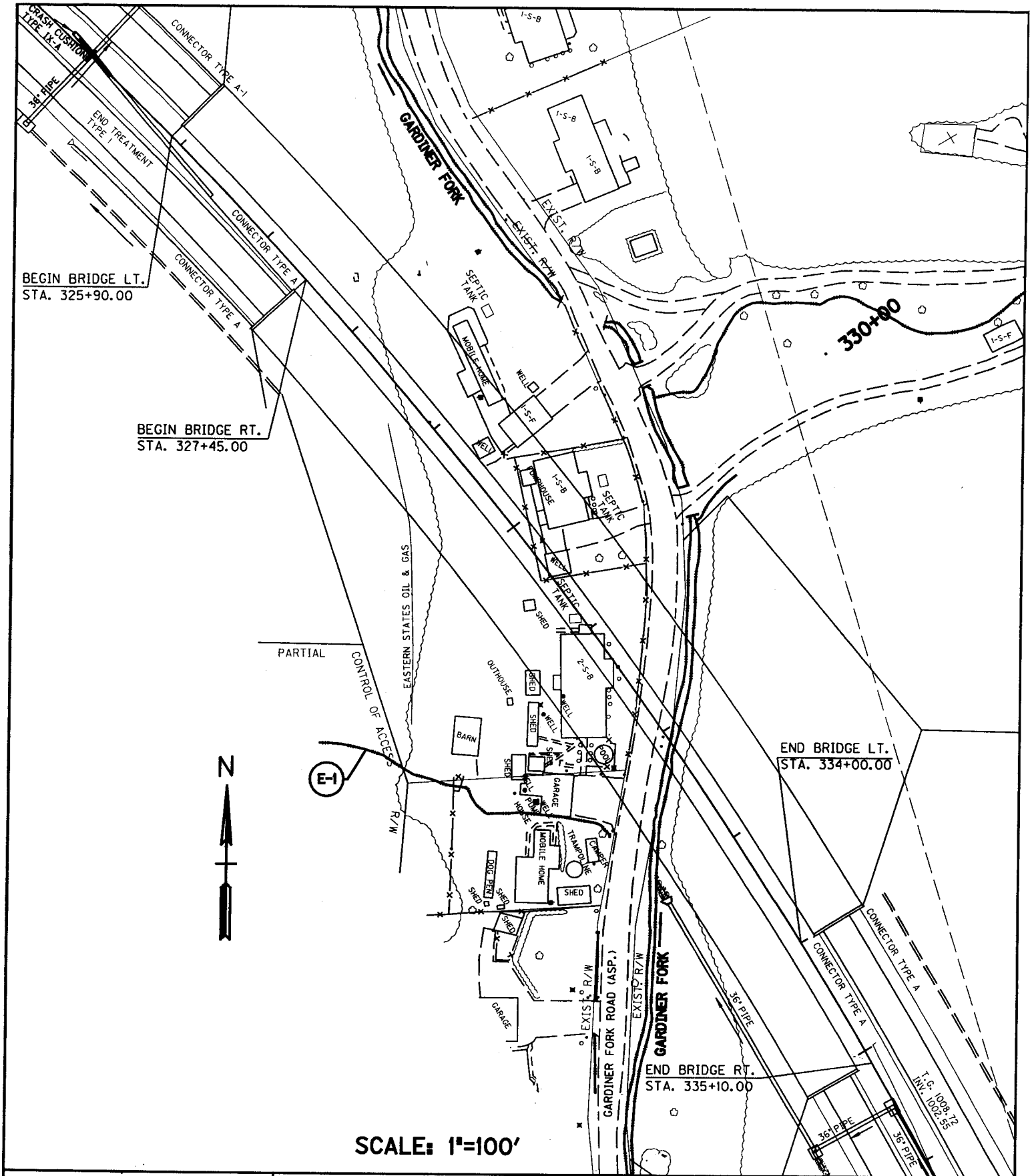
KENTUCKY
STATE OF:

MILE POINT:

12-263.31
ITEM NO.:

1 OF 44
SHEET NO.

DATE: mo. /yr.



~NOTES~

APPLICATION BY

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
DIVISION OF
ENVIRONMENTAL ANALYSIS

Gardiner Fork Bridge, Begin Station 325+90 & 327+45

PROPOSED ACTIVITIES:

Ephemeral E-1 of Gardiner Fork — STREAM NAME:

AT OR NEAR:

Pike — COUNTY OF:

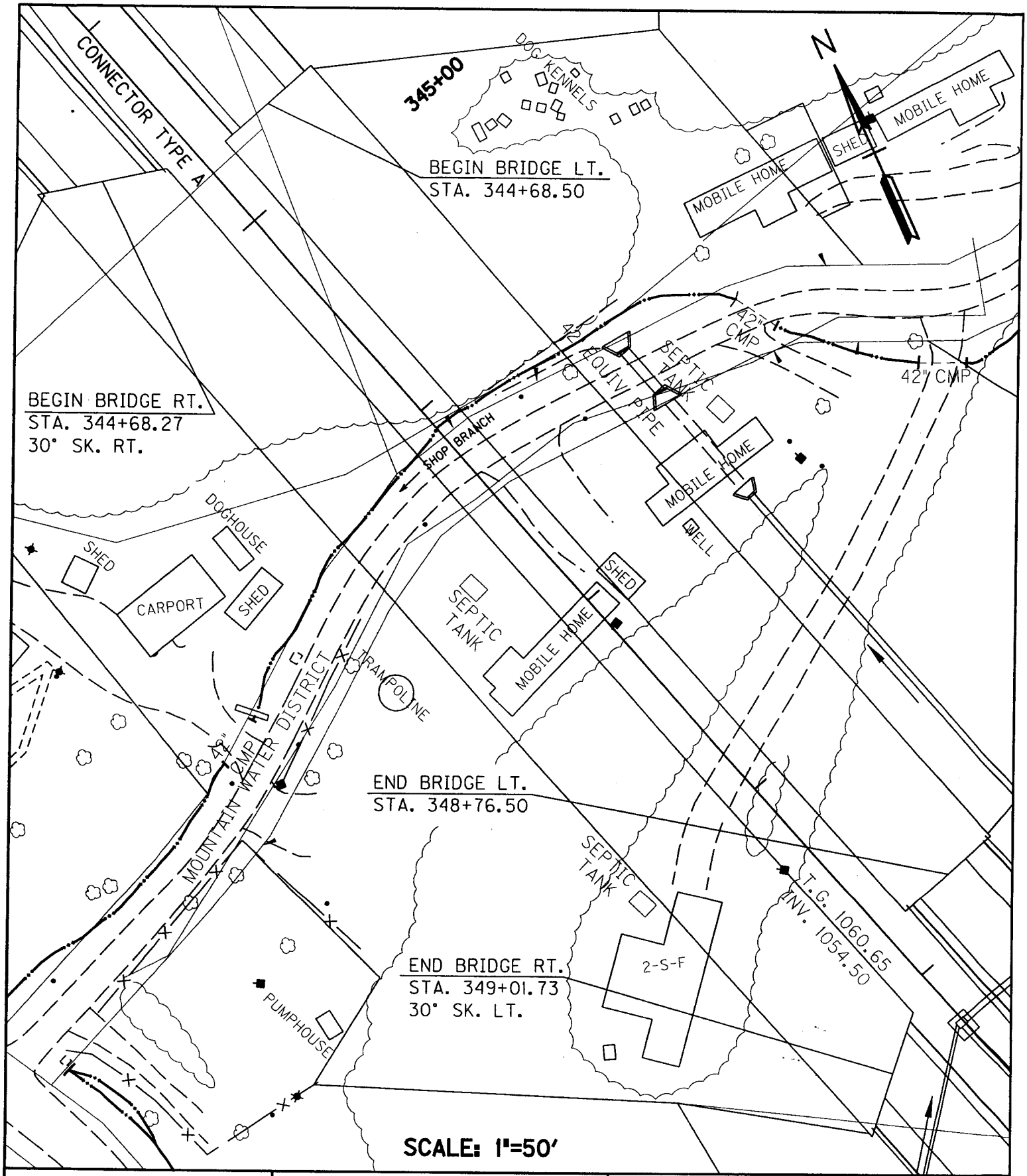
KENTUCKY — STATE OF:

MILE POINT:

12-263.31 — ITEM NO.:

3 OF 44 — SHEET NO.

DATE: mo. /yr.



~NOTES~

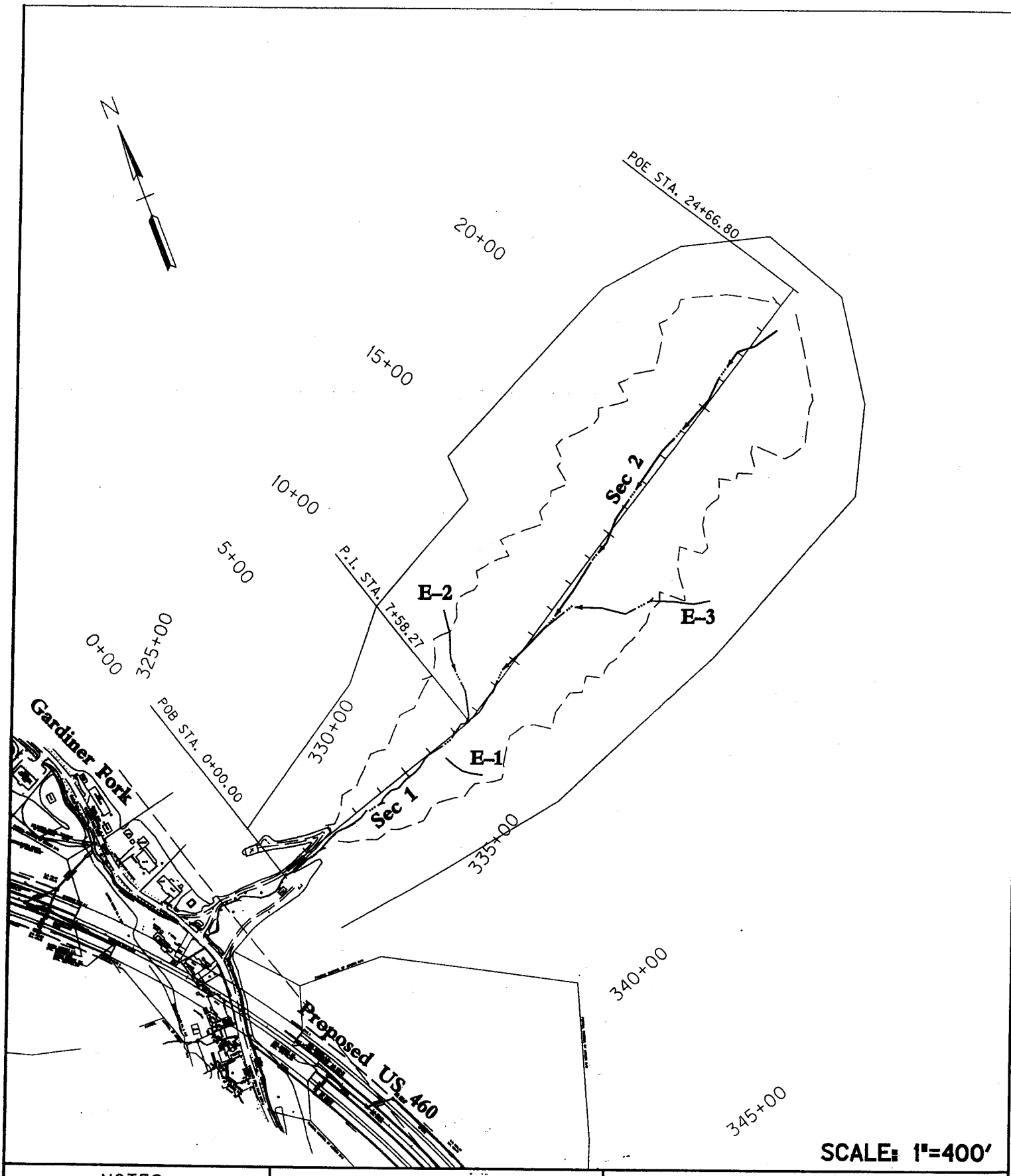
APPLICATION BY

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
DIVISION OF
ENVIRONMENTAL ANALYSIS

Shop Branch Bridge, Begin Station 344+68.27 & 344+68.50
PROPOSED ACTIVITIES:

Shop Branch STREAM NAME:	AT OR NEAR:
Pike COUNTY OF:	KENTUCKY STATE OF:
MILE POINT:	12-263.31 ITEM NO.:
	5 OF 44 SHEET NO.

DATE: mo. /yr.



SCALE: 1"=400'

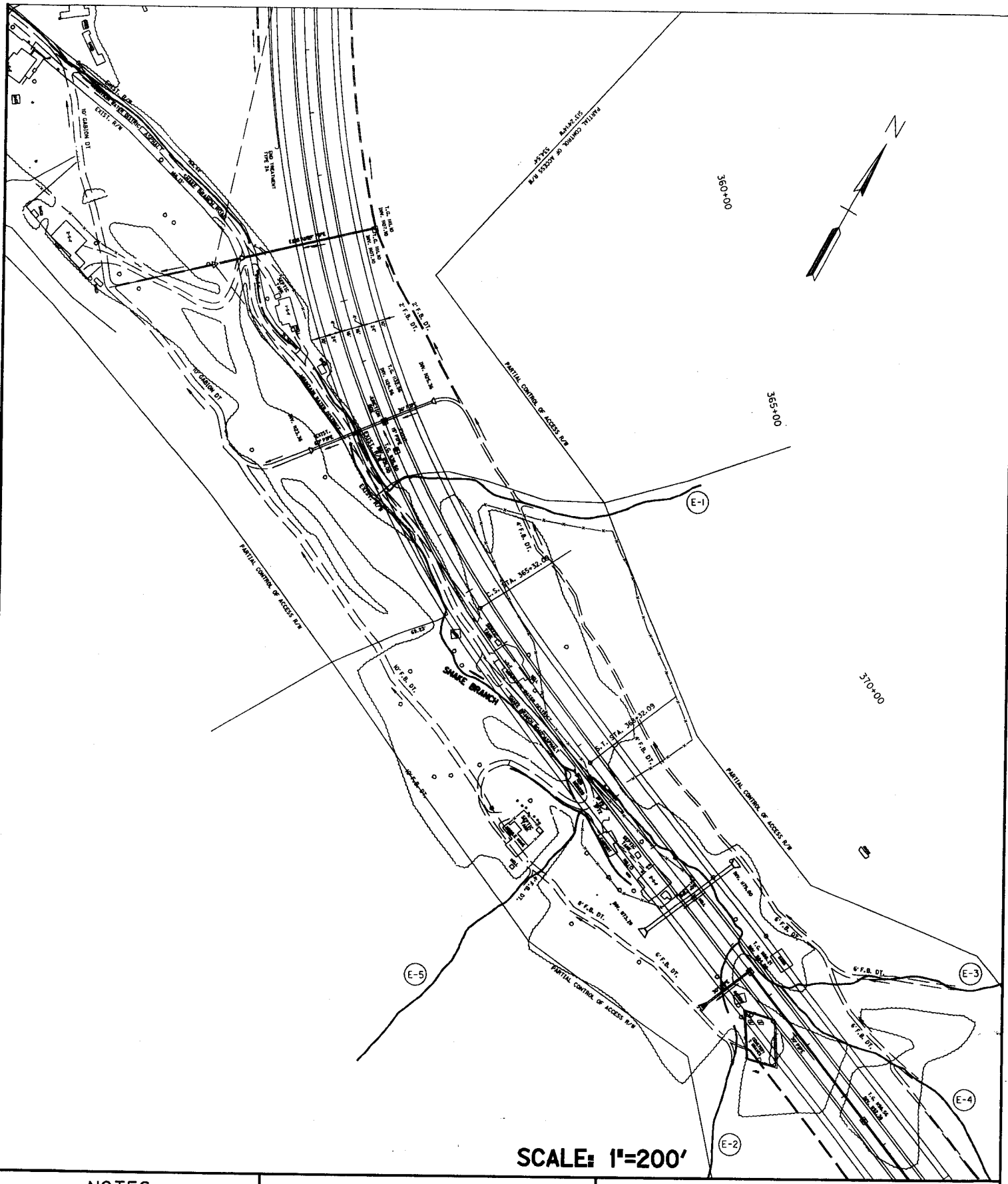
~NOTES~

APPLICATION BY

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
DIVISION OF
ENVIRONMENTAL ANALYSIS

Sta. 330+00 Excess Material Site	
PROPOSED ACTIVITIES:	
Gardiner Fork	
STREAM NAME:	AT OR NEAR:
Pike	KENTUCKY
COUNTY OF:	STATE OF:
MILE POINT:	12-263.31 ITEM NO.:
	4A OF 44 SHEET NO.

DATE: mo. /yr.



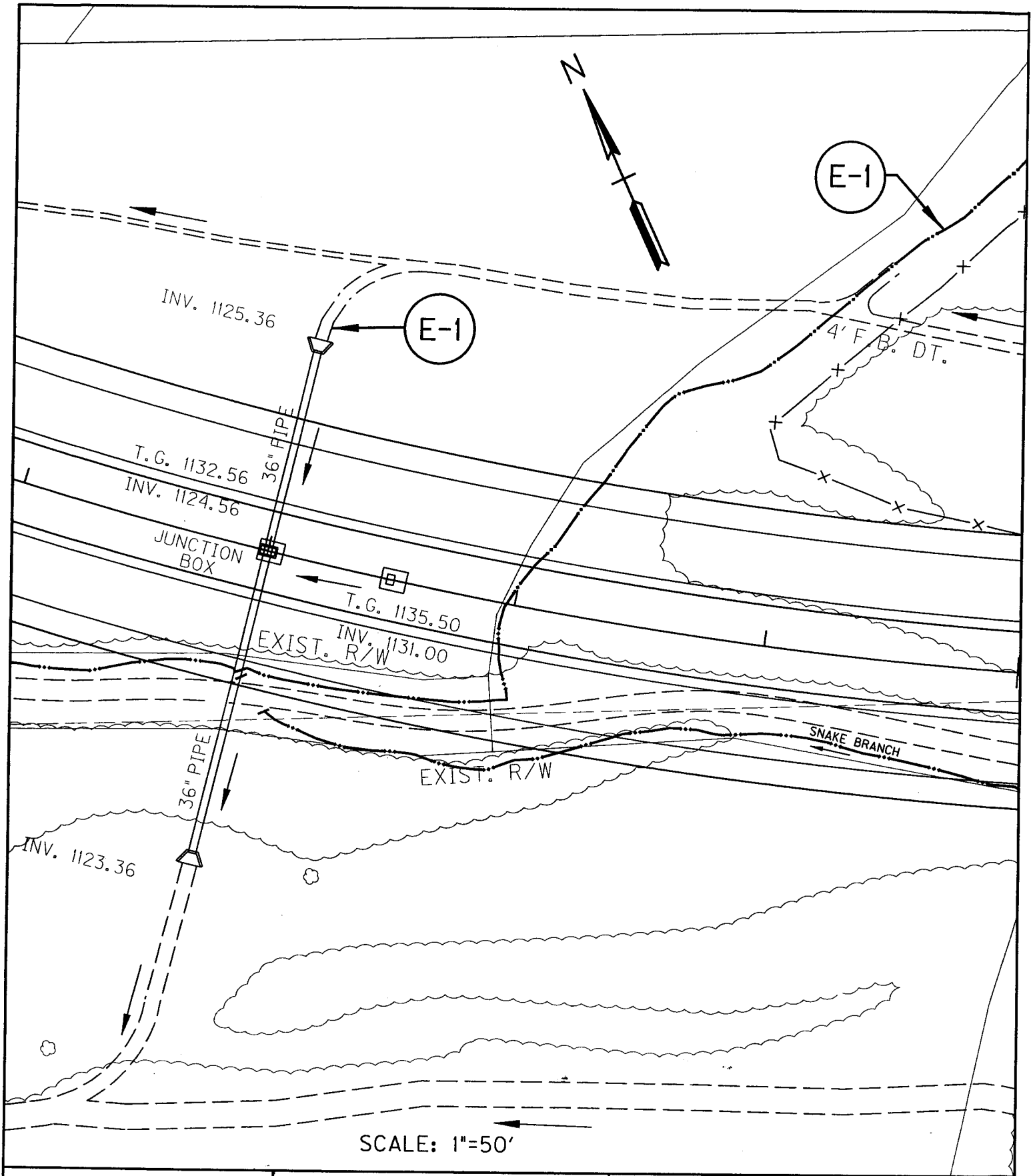
~NOTES~

APPLICATION BY

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
DIVISION OF
ENVIRONMENTAL ANALYSIS

Diversion of Snake Branch PROPOSED ACTIVITIES:	
Snake Branch STREAM NAME:	Sta. 355+00 to Sta. 382+50 AT OR NEAR:
Pike COUNTY OF:	KENTUCKY STATE OF:
MILE POINT:	12-263.31 ITEM NO.:
	7 OF 44 SHEET NO.

DATE: mo. /yr.



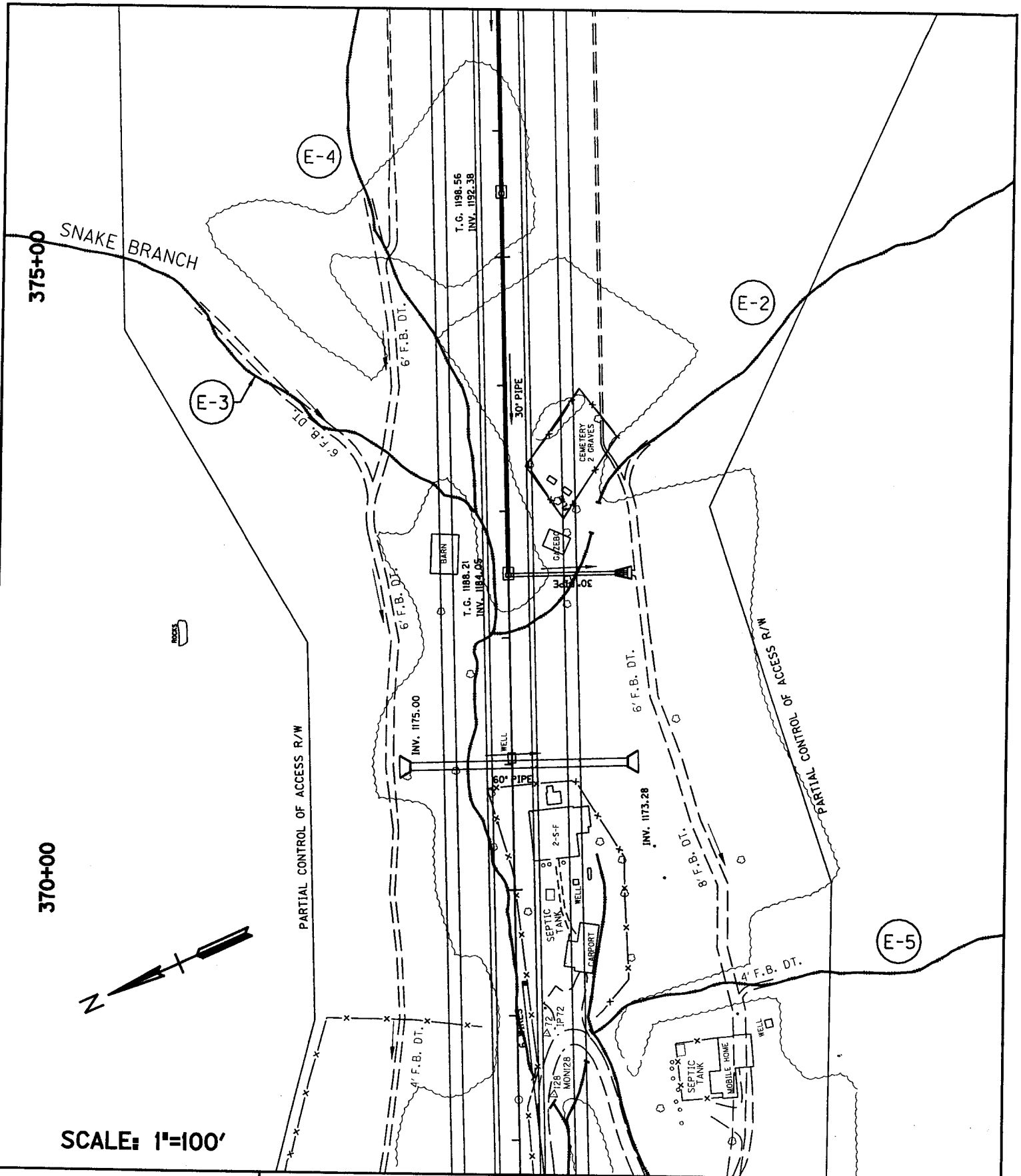
~NOTES~

APPLICATION BY

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
DIVISION OF
ENVIRONMENTAL ANALYSIS

Sta. 362+00 - 36" Pipe Const.	
PROPOSED ACTIVITIES:	
Ephemeral E-1 of Snake Branch	
STREAM NAME:	AT OR NEAR:
Pike	KENTUCKY
COUNTY OF:	STATE OF:
MILE POINT:	12-263.31 ITEM NO.:
	8 OF 44 SHEET NO.

DATE: mo. /yr.



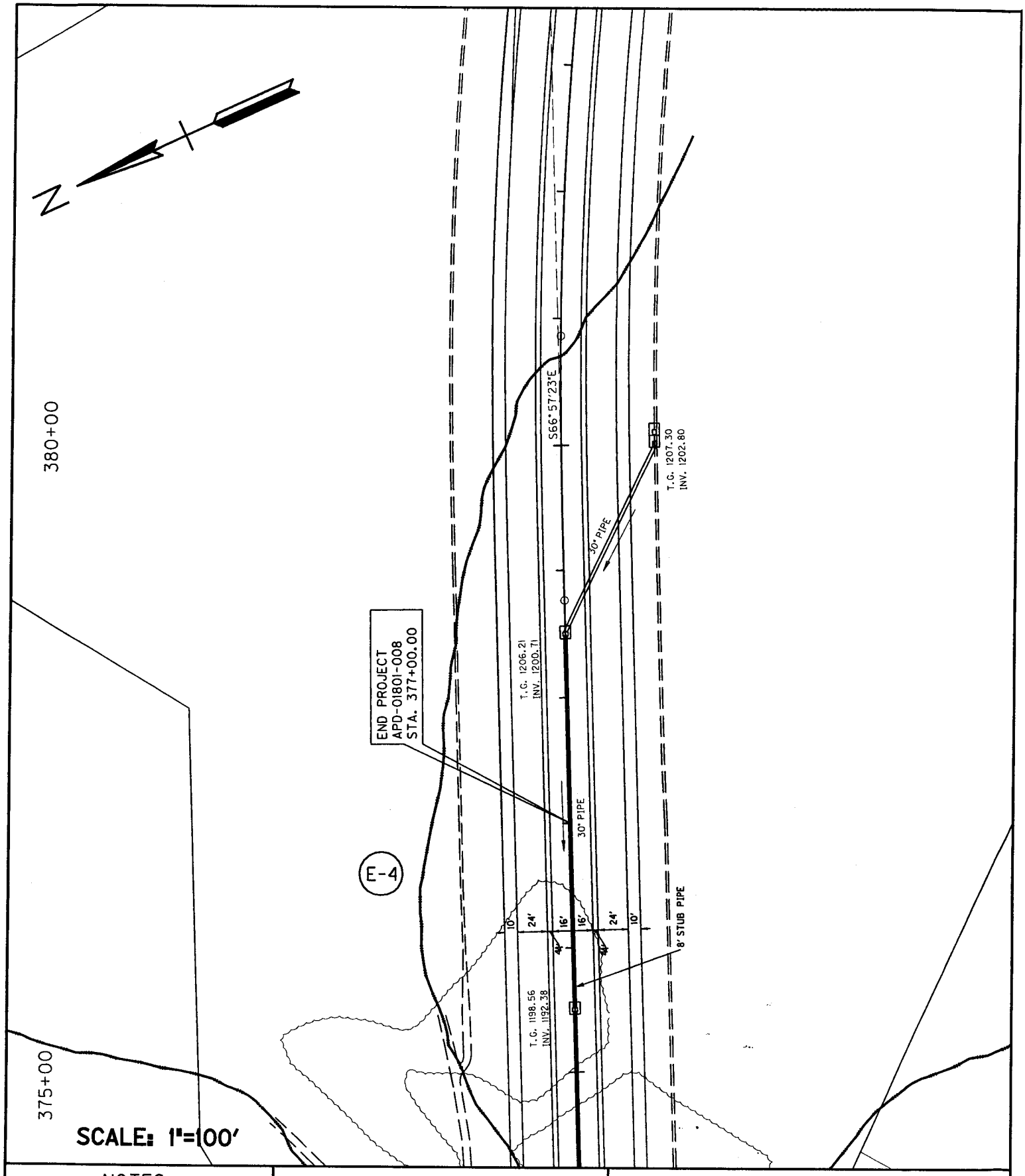
~NOTES~

APPLICATION BY

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
DIVISION OF
ENVIRONMENTAL ANALYSIS

PROPOSED ACTIVITIES: Sta. 371+00 - 36" Pipe Const., Sta. 372+50 - 30" Pipe Const.	
STREAM NAME: Ephemeral E-2, E-3, E-4 of Snake Branch	AT OR NEAR:
COUNTY OF: Pike	STATE OF: KENTUCKY
MILE POINT:	ITEM NO.: 12-263.31
	SHEET NO.: 10 OF 44

DATE: mo. /yr.



~NOTES~
Headwaters of Snake Branch

APPLICATION BY

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
DIVISION OF
ENVIRONMENTAL ANALYSIS

Sta. 378+50 - Rt. Sta. 380+00 - 30" Pipe Const.
PROPOSED ACTIVITIES:

Ephemeral E-4 of Snake Branch
STREAM NAME:

AT OR NEAR:

Pike
COUNTY OF:

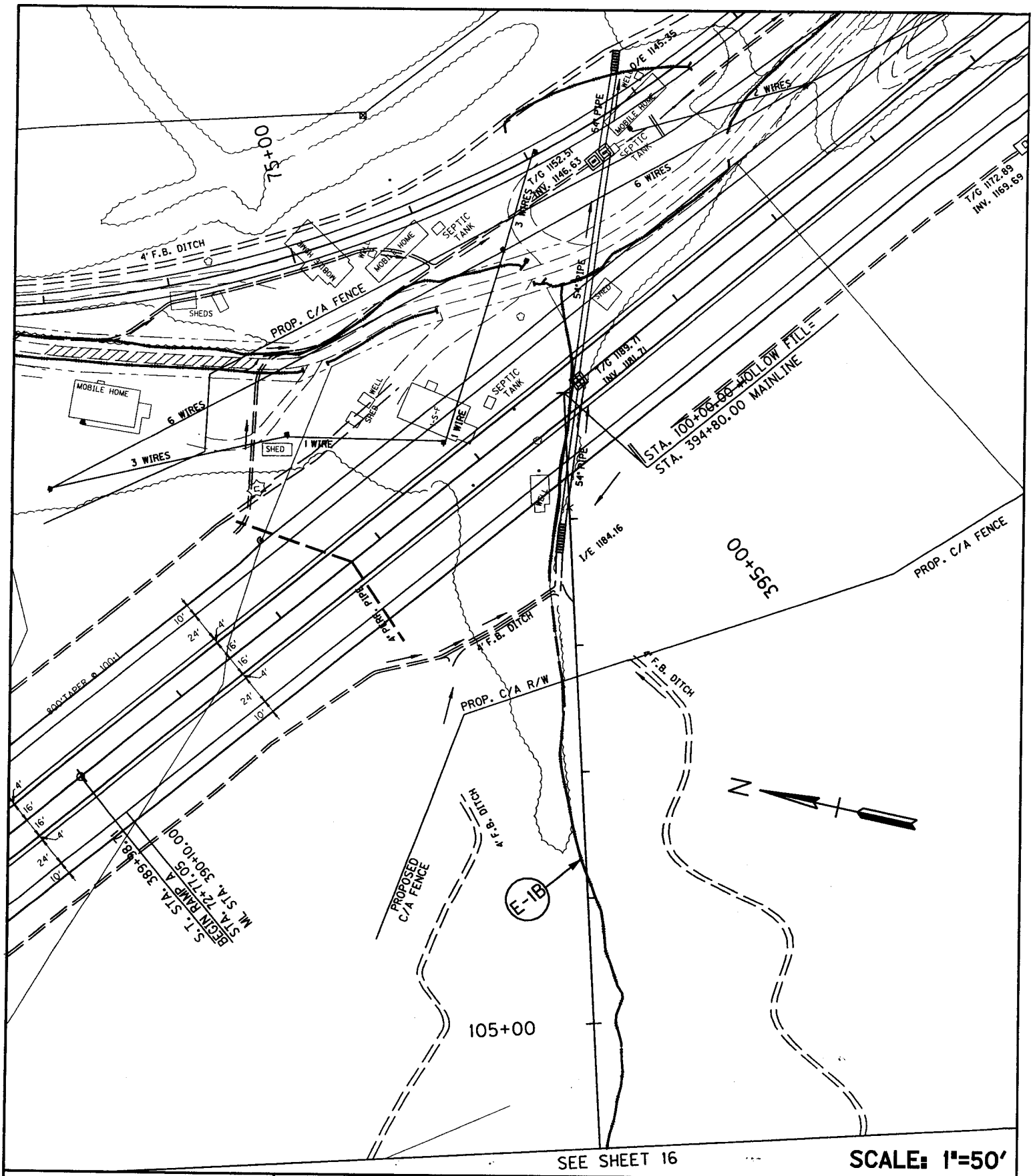
KENTUCKY
STATE OF:

MILE POINT:

12-263.31
ITEM NO.:

13 OF 44
SHEET NO.

DATE: mo. /yr.



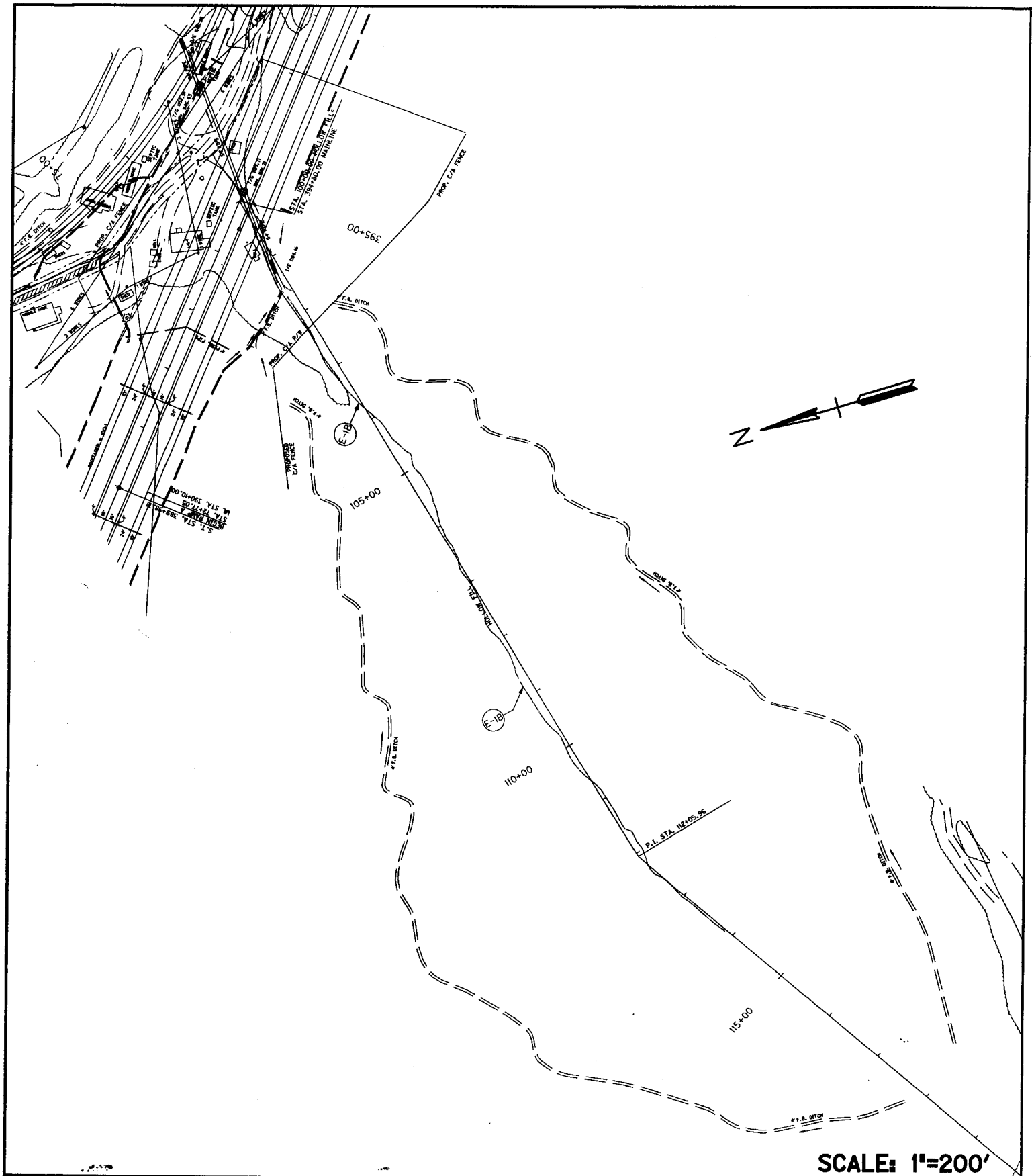
~NOTES~

APPLICATION BY

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
DIVISION OF
ENVIRONMENTAL ANALYSIS

Sta. 395+00 - 54" Pipe Const., Excess material location PROPOSED ACTIVITIES:	
Tributary of Mays Branch STREAM NAME:	AT OR NEAR:
Pike COUNTY OF:	KENTUCKY STATE OF:
MILE POINT:	12-263.42 ITEM NO.:
15 OF 44 SHEET NO.	

DATE: mo. /yr.



~NOTES~

APPLICATION BY

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
DIVISION OF
ENVIRONMENTAL ANALYSIS

Mays Branch excess material location	
PROPOSED ACTIVITIES:	
Mays Branch	Sta. 395+00
STREAM NAME:	AT OR NEAR:
Pike	KENTUCKY
COUNTY OF:	STATE OF:
MILE POINT:	12-263.42 ITEM NO.:
	18 OF 44 SHEET NO.

DATE: mo. /yr.

~NOTES~

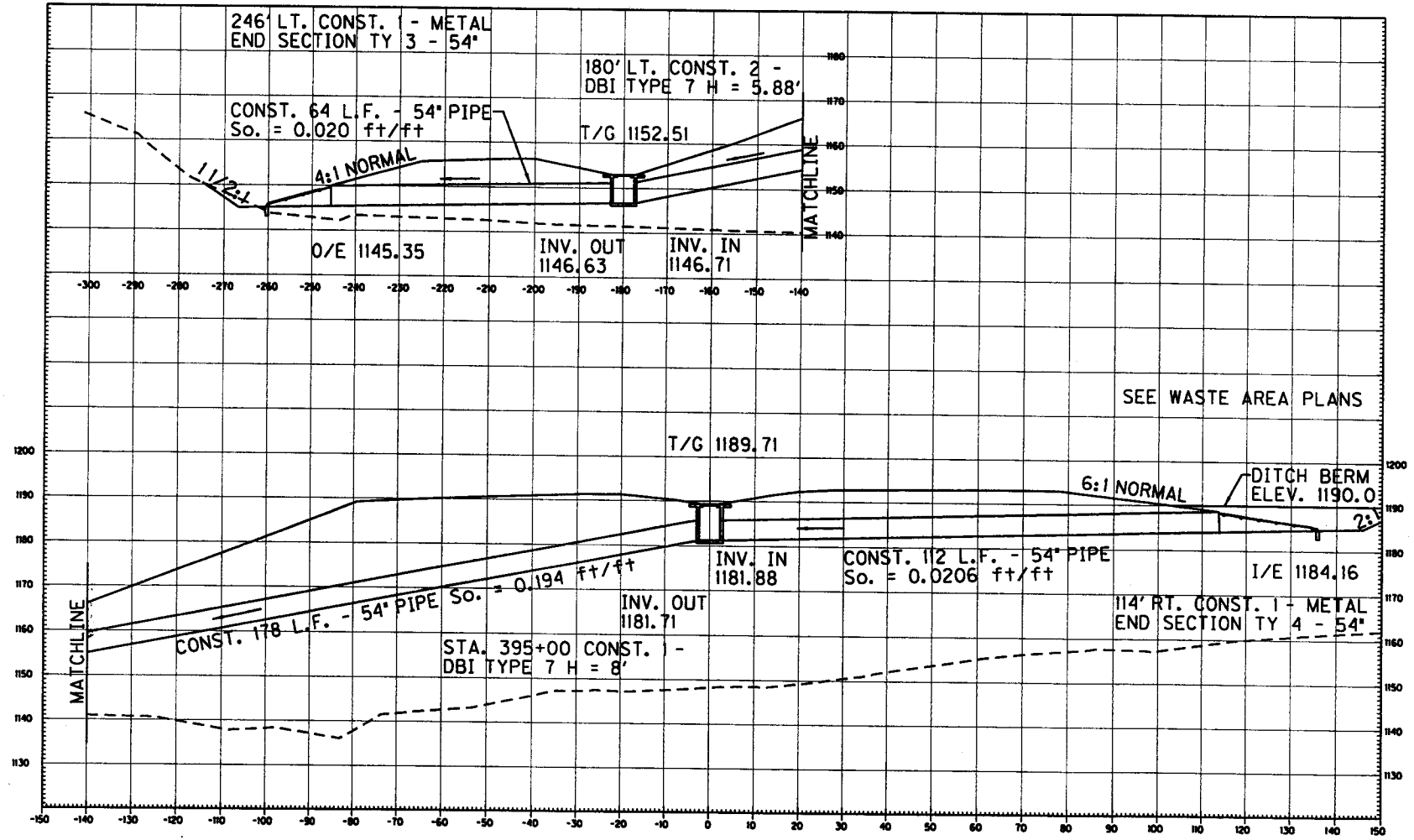
FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN	10	16.3	1153.10
CHECK	100	24.7	1153.29

•GRATE CONTROLS

FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN	10	5.3	1190.15•
CHECK	100	7.6	1190.27•

•GRATE CONTROLS

FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER (ELEV)
DESIGN	10	84	1188.14
CHECK	100	126	1189.61



STA. 395+00
US 460
45° SKEW RT.

APPLICATION BY

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
DIVISION OF
ENVIRONMENTAL ANALYSIS

PROPOSED ACTIVITIES: Sta. 395+00 - Pipe Sheet

STREAM NAME: Mays Branch

AT OR NEAR:

COUNTY OF: Pike

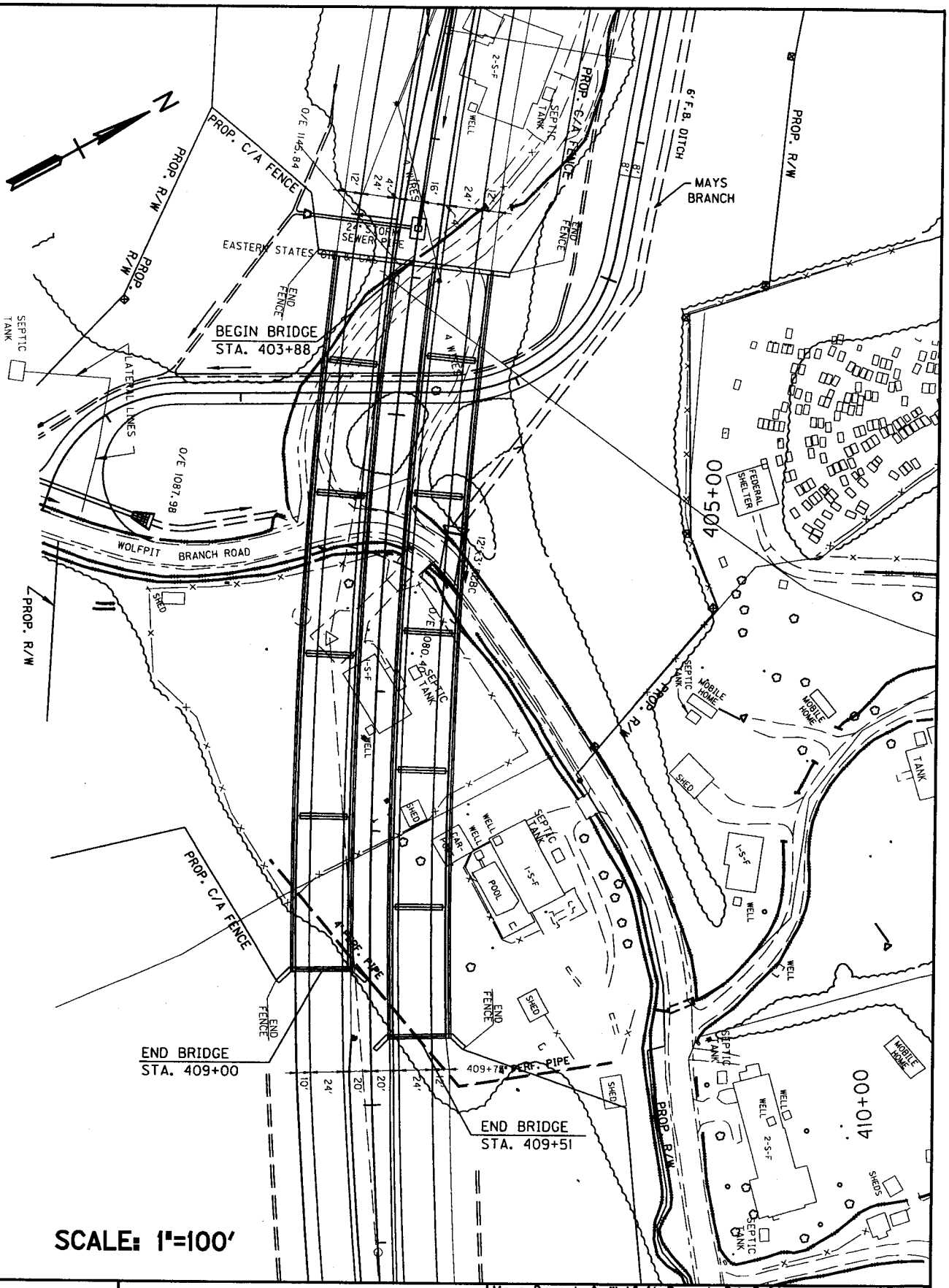
STATE OF: KENTUCKY

MILE POINT:

ITEM NO.: 12-263.42

SHEET NO. 19 OF 44

DATE: mo. /yr.



SCALE: 1"=100'

~NOTES~

APPLICATION BY

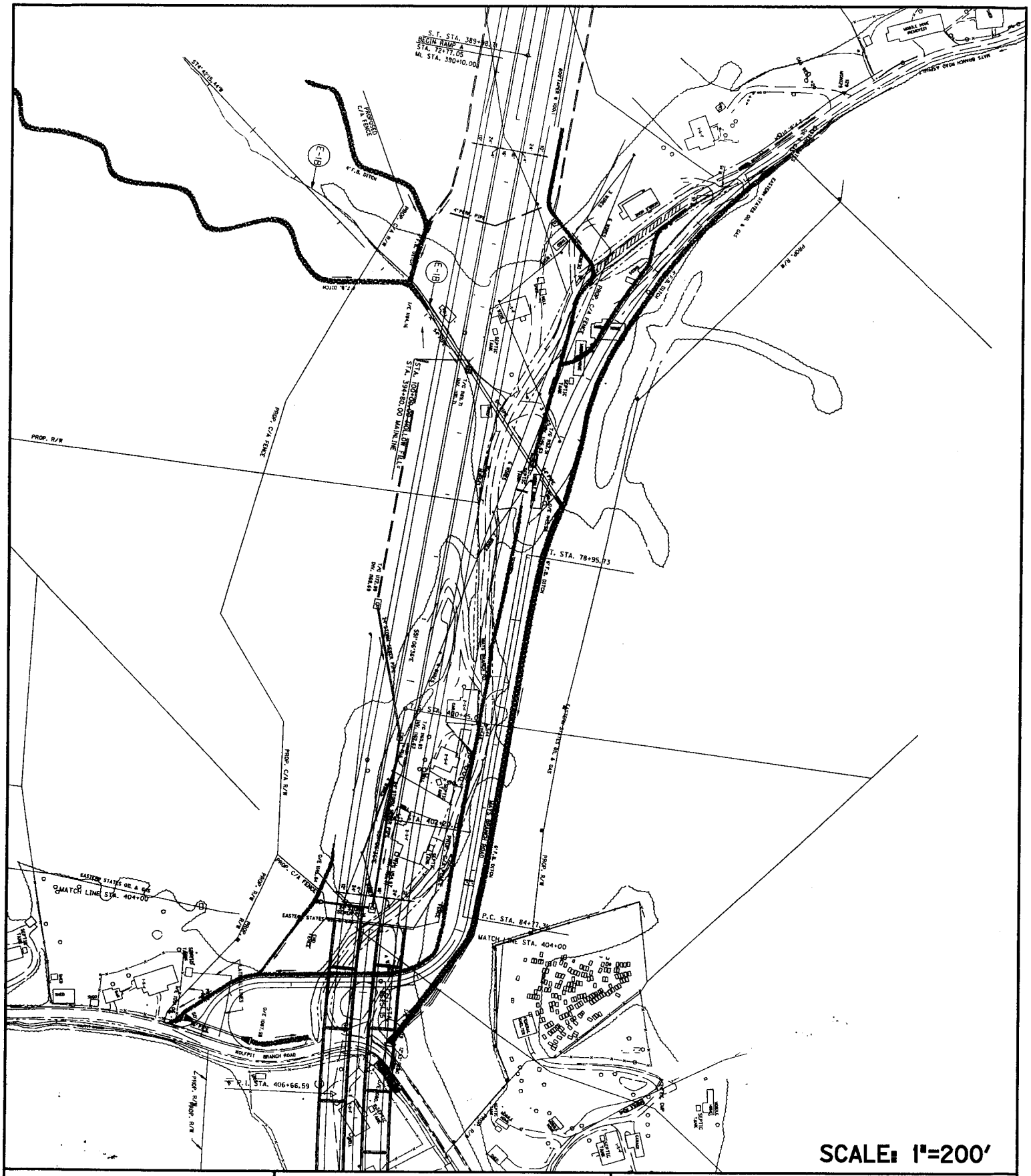
KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
DIVISION OF
ENVIRONMENTAL ANALYSIS

Mays Branch & Wolfpit Branch Rd. Bridge, Begin Station 403+88
PROPOSED ACTIVITIES:

Wolfpit Branch STREAM NAME:	 AT OR NEAR:
Pike COUNTY OF:	KENTUCKY STATE OF:

MILE POINT:	12-263.42 ITEM NO.:	20 OF 44 SHEET NO.

DATE: mo. /yr.



SCALE: 1"=200'

~NOTES~

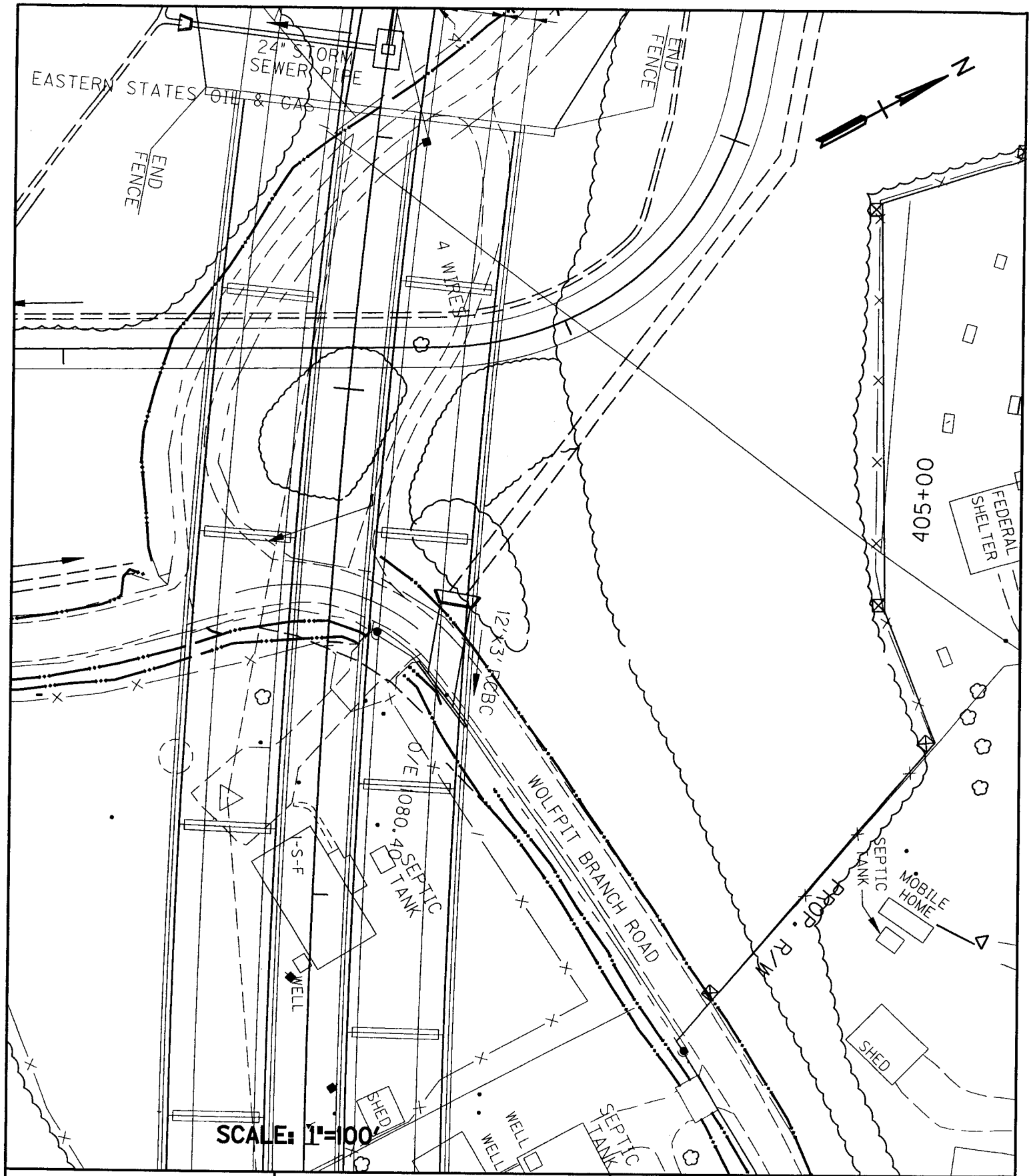
135.5' Lt. Sta. 86+51.2

APPLICATION BY

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
DIVISION OF
ENVIRONMENTAL ANALYSIS

Sta. 405+00 Wolfpit Br Rd 12' x 3' RCBC Const.	
PROPOSED ACTIVITIES:	
Wolfpit Branch	
STREAM NAME:	AT OR NEAR:
Pike	KENTUCKY
COUNTY OF:	STATE OF:
	12-263.42 / 23 OF 44
MILE POINT:	ITEM NO.: / SHEET NO.

DATE: mo. /yr.



~NOTES~

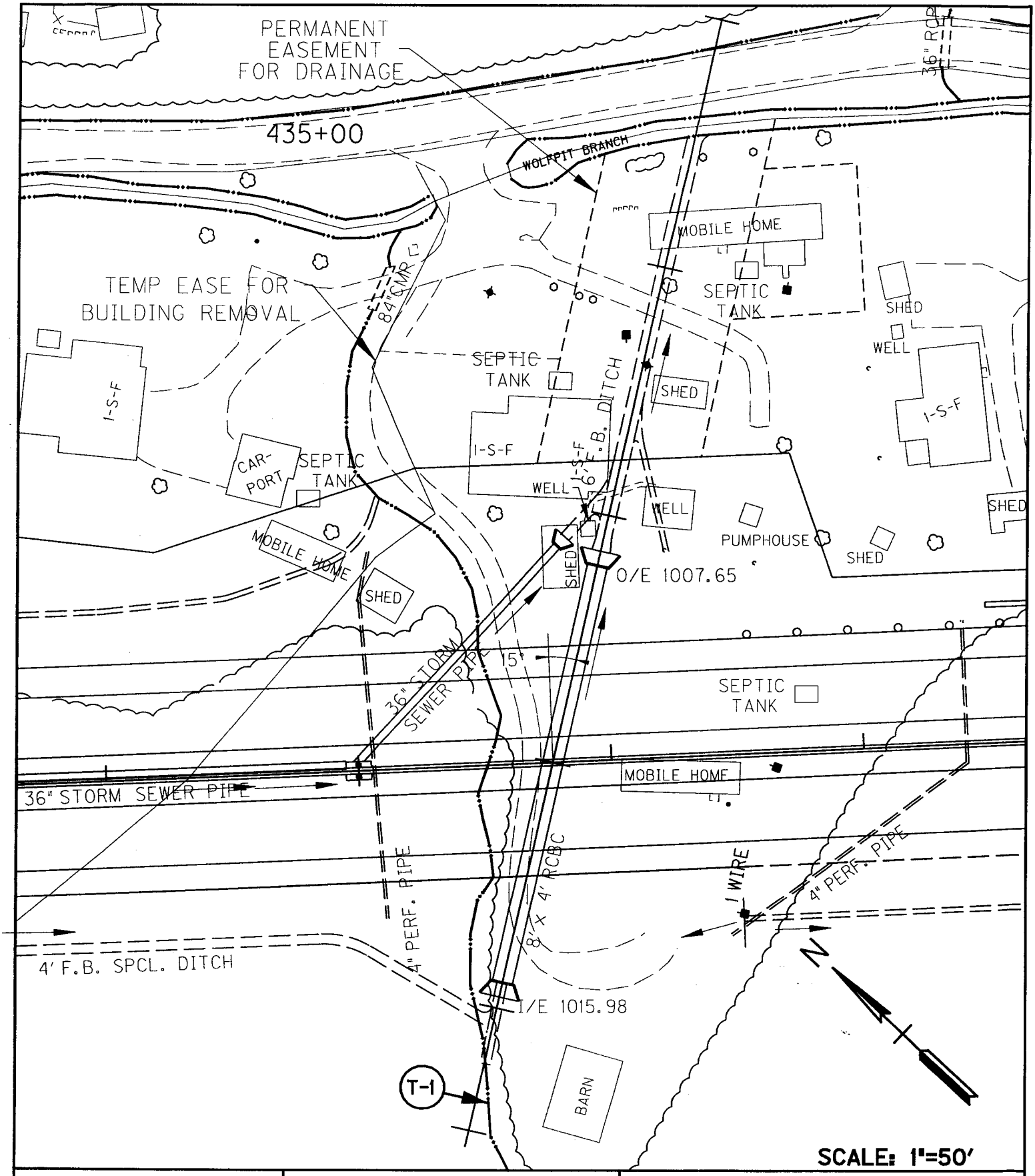
135.5' Lt. Sta. 86+51.2

APPLICATION BY

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
DIVISION OF
ENVIRONMENTAL ANALYSIS

Sta. 405+00 Wolfpit Br Rd 12' x 3' RCBC Const.	
PROPOSED ACTIVITIES:	
Wolfpit Branch	
STREAM NAME:	AT OR NEAR:
Pike	KENTUCKY
COUNTY OF:	STATE OF:
	12-263.42 / 24 OF 44
MILE POINT:	ITEM NO.: / SHEET NO.

DATE: mo. /yr.



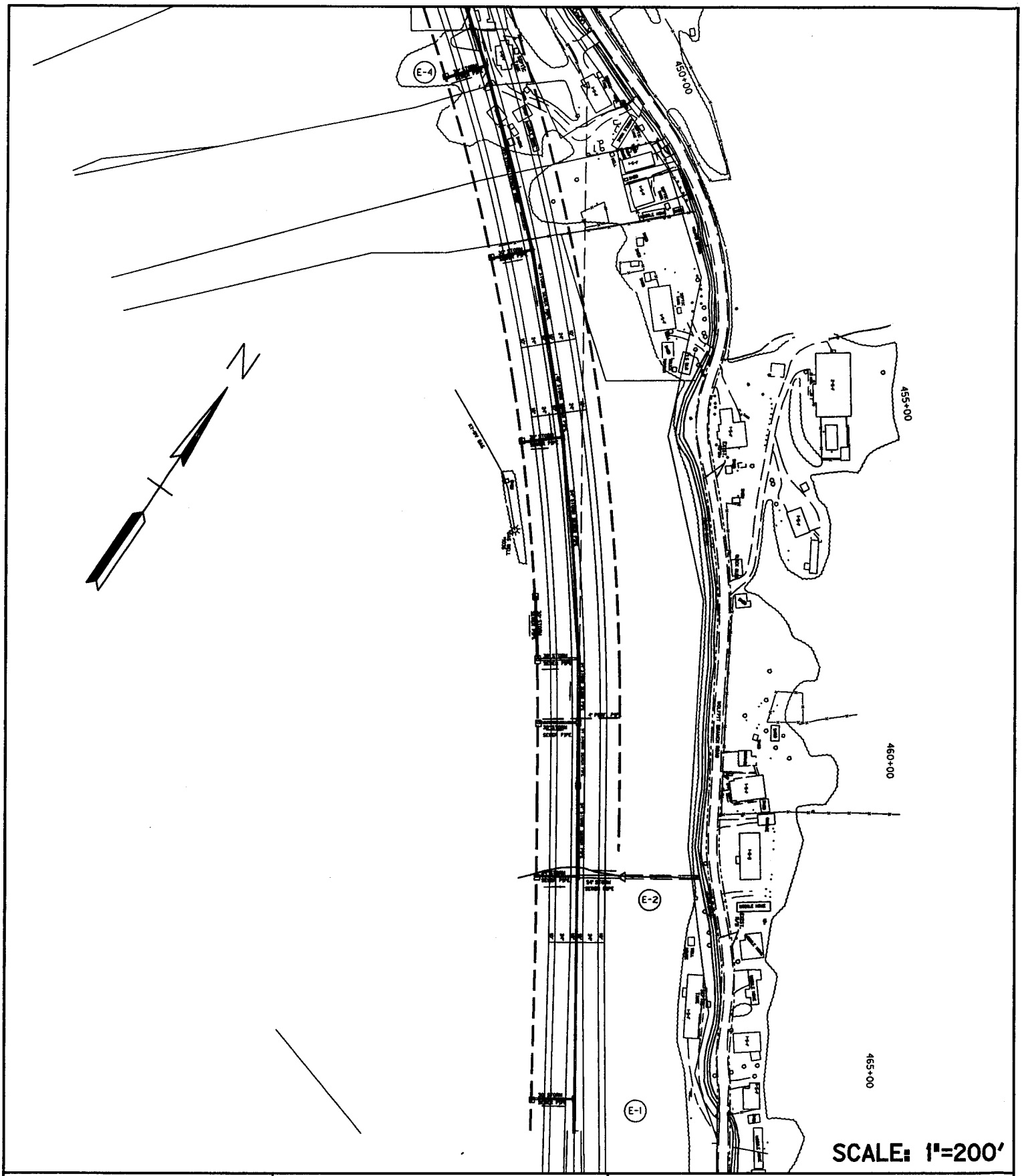
~NOTES~

APPLICATION BY

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
DIVISION OF ENVIRONMENTAL ANALYSIS

Sta. 435+75 8' x 4' RCBC	
PROPOSED ACTIVITIES:	
Wolfpit Branch	
STREAM NAME:	AT OR NEAR:
Pike	KENTUCKY
COUNTY OF:	STATE OF:
MILE POINT:	12-263.42 ITEM NO.:
	26 OF 44 SHEET NO.

DATE: mo. /yr.



~NOTES~

APPLICATION BY

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
DIVISION OF
ENVIRONMENTAL ANALYSIS

Sta. 461+95, 24" & 54" Storm Sewer
PROPOSED ACTIVITIES:

Wolfpit Branch
STREAM NAME:

AT OR NEAR:

Pike
COUNTY OF:

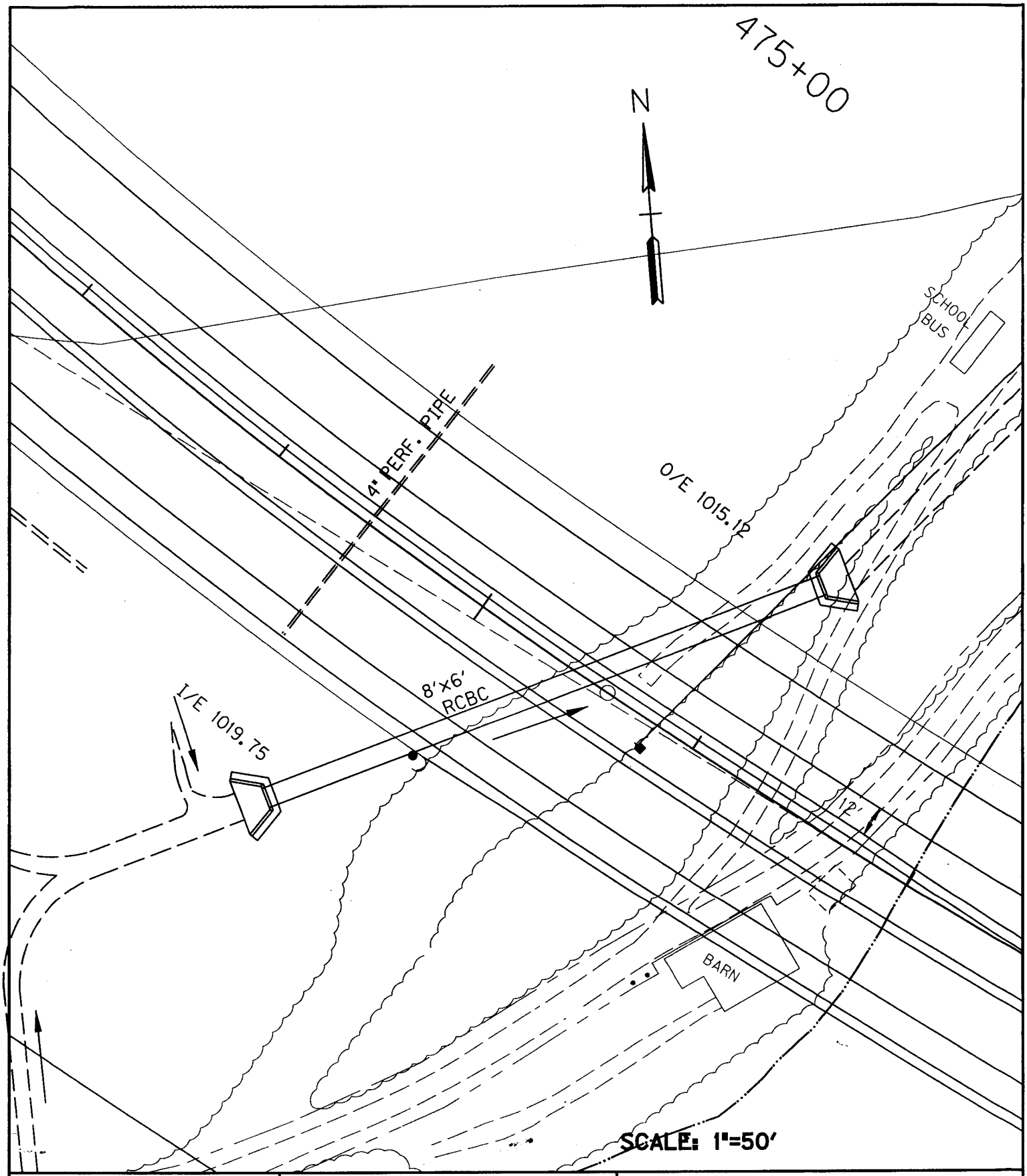
KENTUCKY
STATE OF:

MILE POINT:

12-263.45
ITEM NO.:

28 OF 44
SHEET NO.

DATE: mo. /yr.



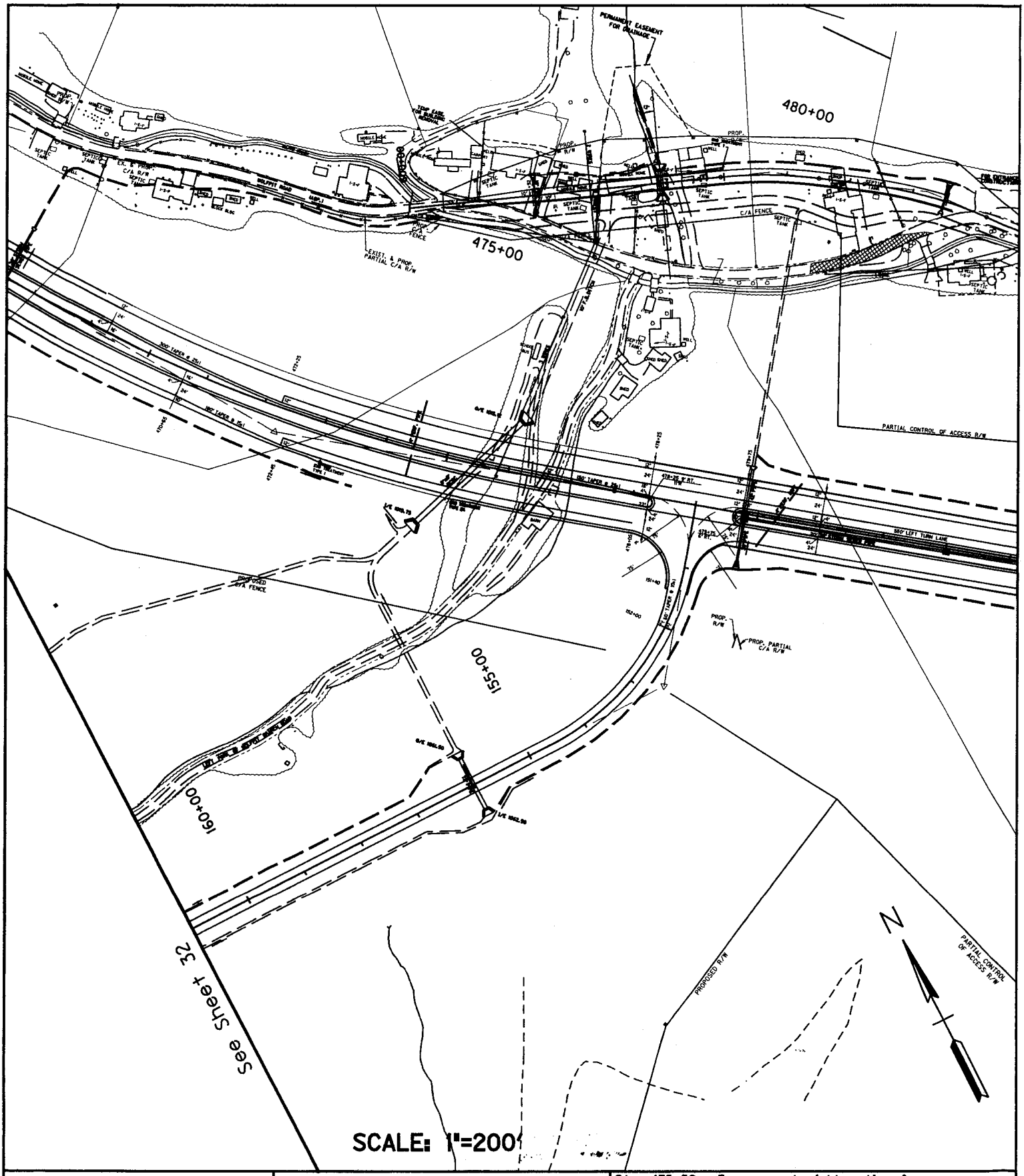
~NOTES~

APPLICATION BY

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
DIVISION OF
ENVIRONMENTAL ANALYSIS

PROPOSED ACTIVITIES: Sta. 475+50 8'x6' RCBC, excess material location	
STREAM NAME: Lt. Fork of Wolfpit Branch	AT OR NEAR:
COUNTY OF: Pike	STATE OF: KENTUCKY
MILE POINT:	ITEM NO.: 12-263.45
	SHEET NO.: 30 OF 44

DATE: mo. /yr.



~NOTES~

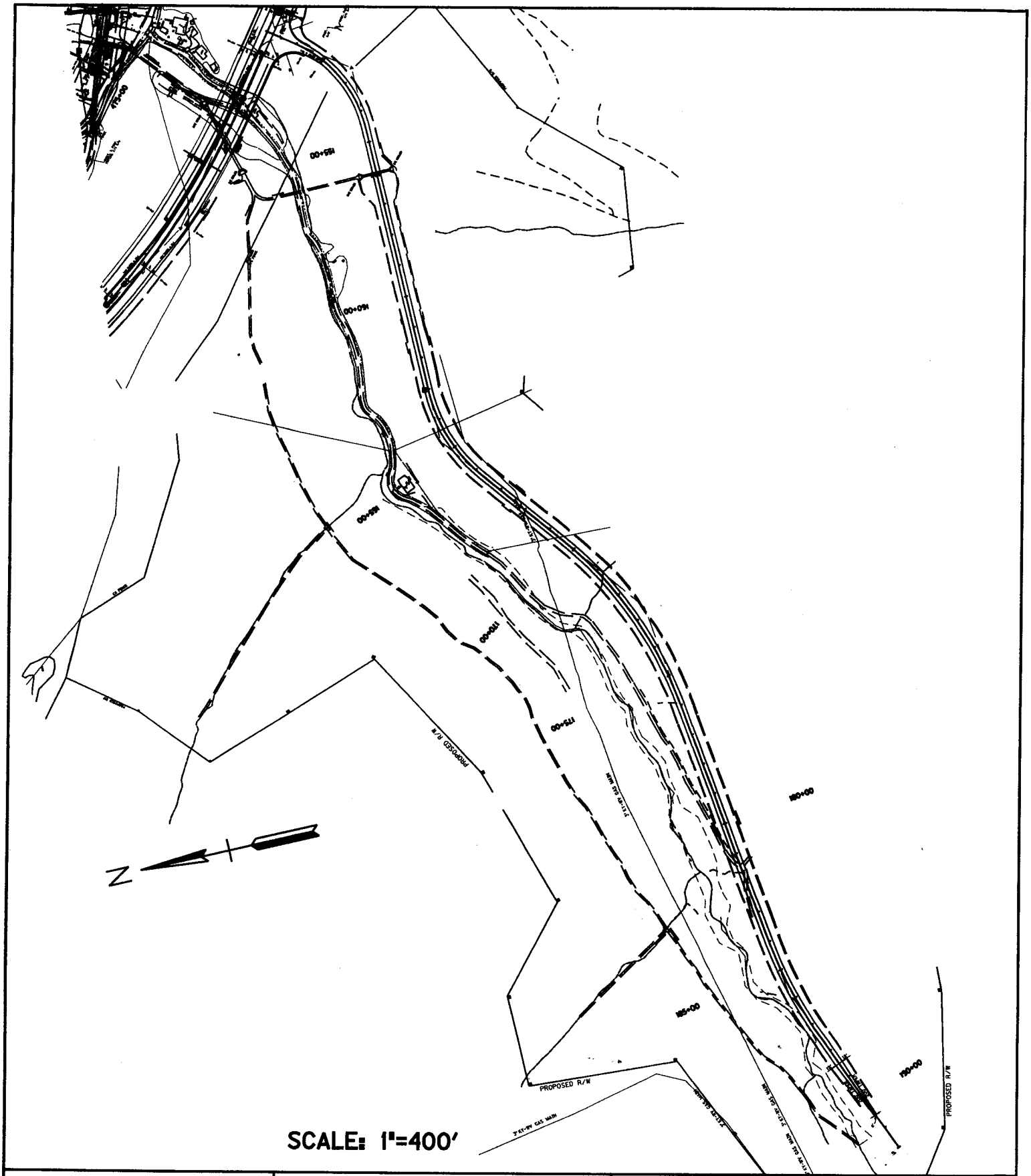
APPLICATION BY

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
DIVISION OF
ENVIRONMENTAL ANALYSIS

Sta. 475+50 - Excess material location &
Sta. 473+80 Wolfpit Branch Channel Change
PROPOSED ACTIVITIES:

LT. Fork of Wolfpit Branch STREAM NAME:	AT OR NEAR:
Pike COUNTY OF:	KENTUCKY STATE OF:
MILE POINT:	12-263.45 ITEM NO.:
31 OF 44 SHEET NO.	

DATE: mo. /yr.



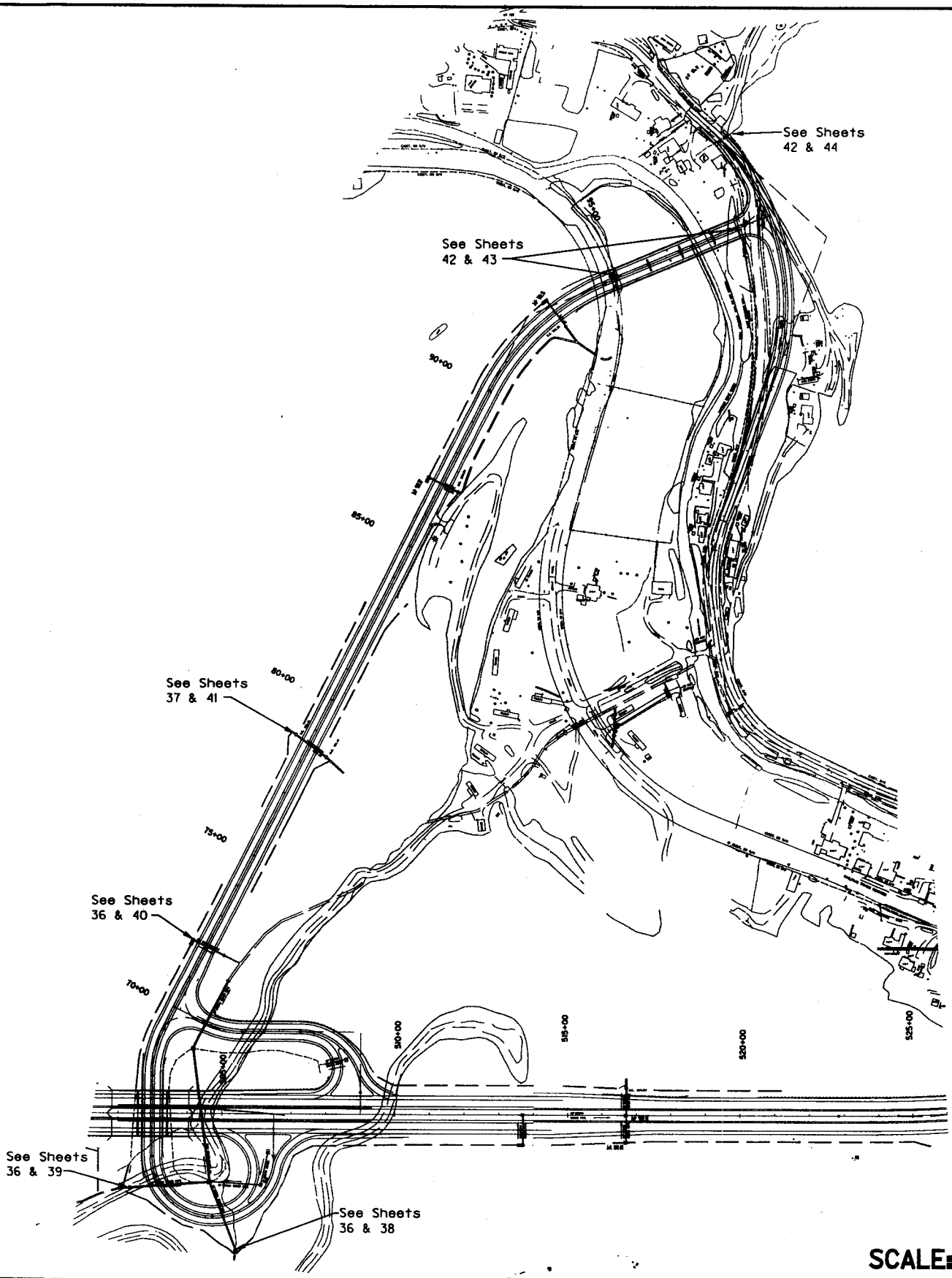
~NOTES~

APPLICATION BY

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
DIVISION OF
ENVIRONMENTAL ANALYSIS

Wolfpit Branch Excess material location	
PROPOSED ACTIVITIES:	
Wolfpit Branch	Sta. 475+50
STREAM NAME:	AT OR NEAR:
Pike	KENTUCKY
COUNTY OF:	STATE OF:
MILE POINT:	12-263.45 ITEM NO.:
	34 OF 44 SHEET NO.

DATE: mo. /yr.



SCALE: 1"=400'

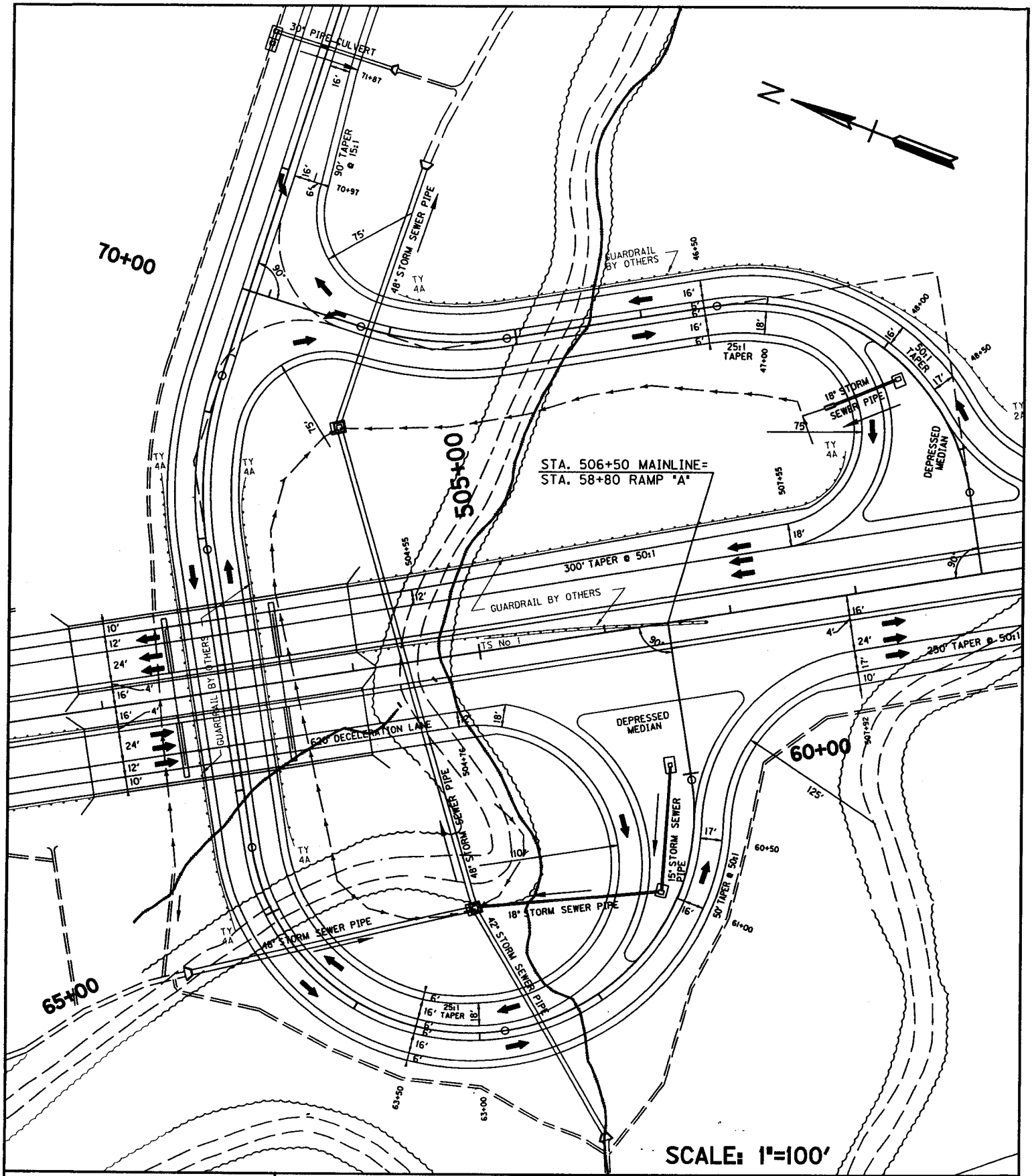
~NOTES~

APPLICATION BY

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
DIVISION OF
ENVIRONMENTAL ANALYSIS

Ramp to KY 195, Marrowbone Creek Bridge	
PROPOSED ACTIVITIES:	
Marrowbone Creek	
STREAM NAME:	AT OR NEAR:
Pike	KENTUCKY
COUNTY OF:	STATE OF:
	12-263.50
MILE POINT:	ITEM NO.:
35A OF 44	
SHEET NO.	

DATE: mo. /yr.



~NOTES~

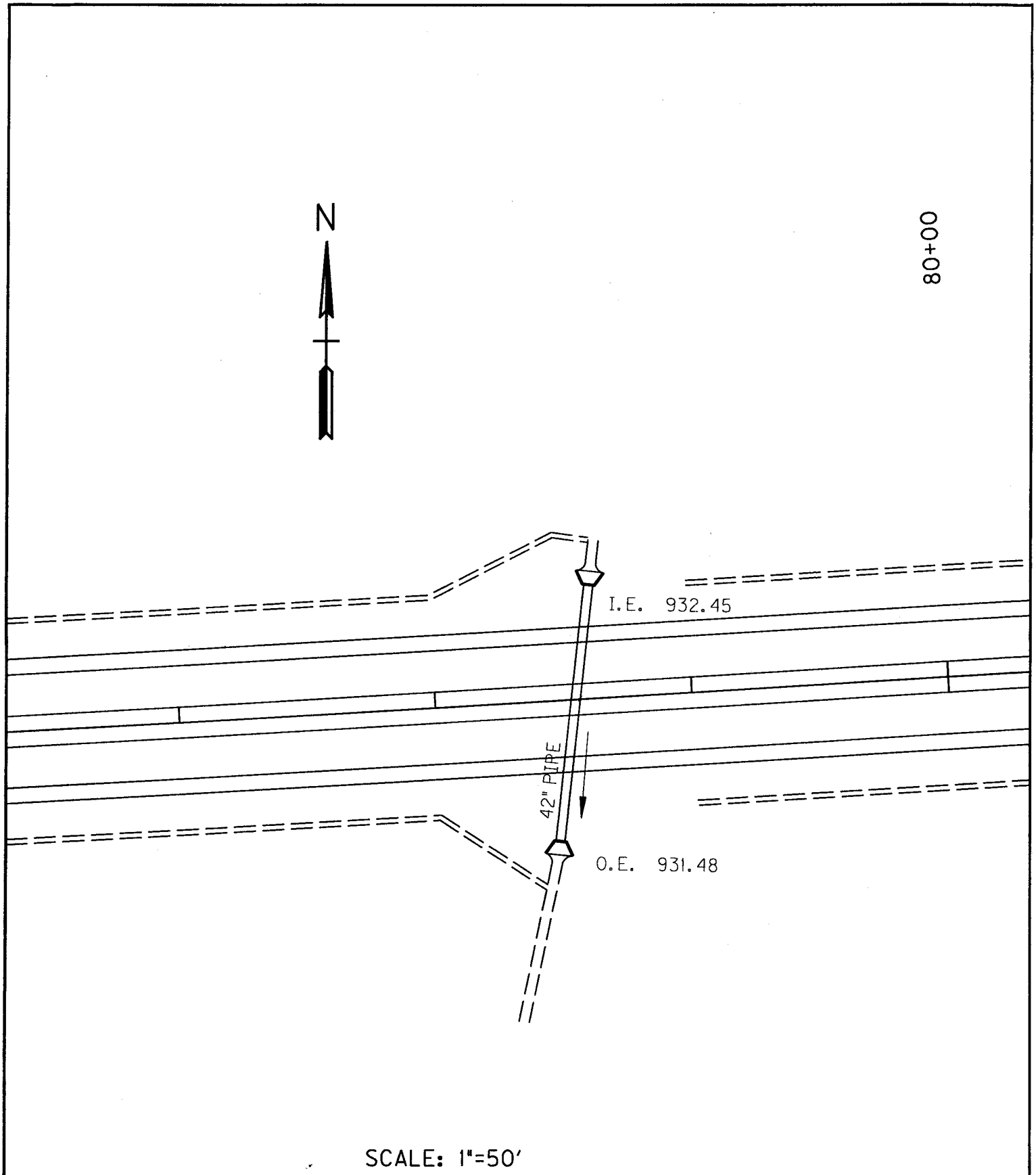
APPLICATION BY

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
DIVISION OF
ENVIRONMENTAL ANALYSIS

Sta. 62+50.85 Ramp "A" ML Sta. 506+50 - 48" Pipe Const., Sta. 64+65.12 Ramp "A" - 48" Pipe Const., Sta. 72+00 Ramp "A" - 30" Pipe Const.
PROPOSED ACTIVITIES:

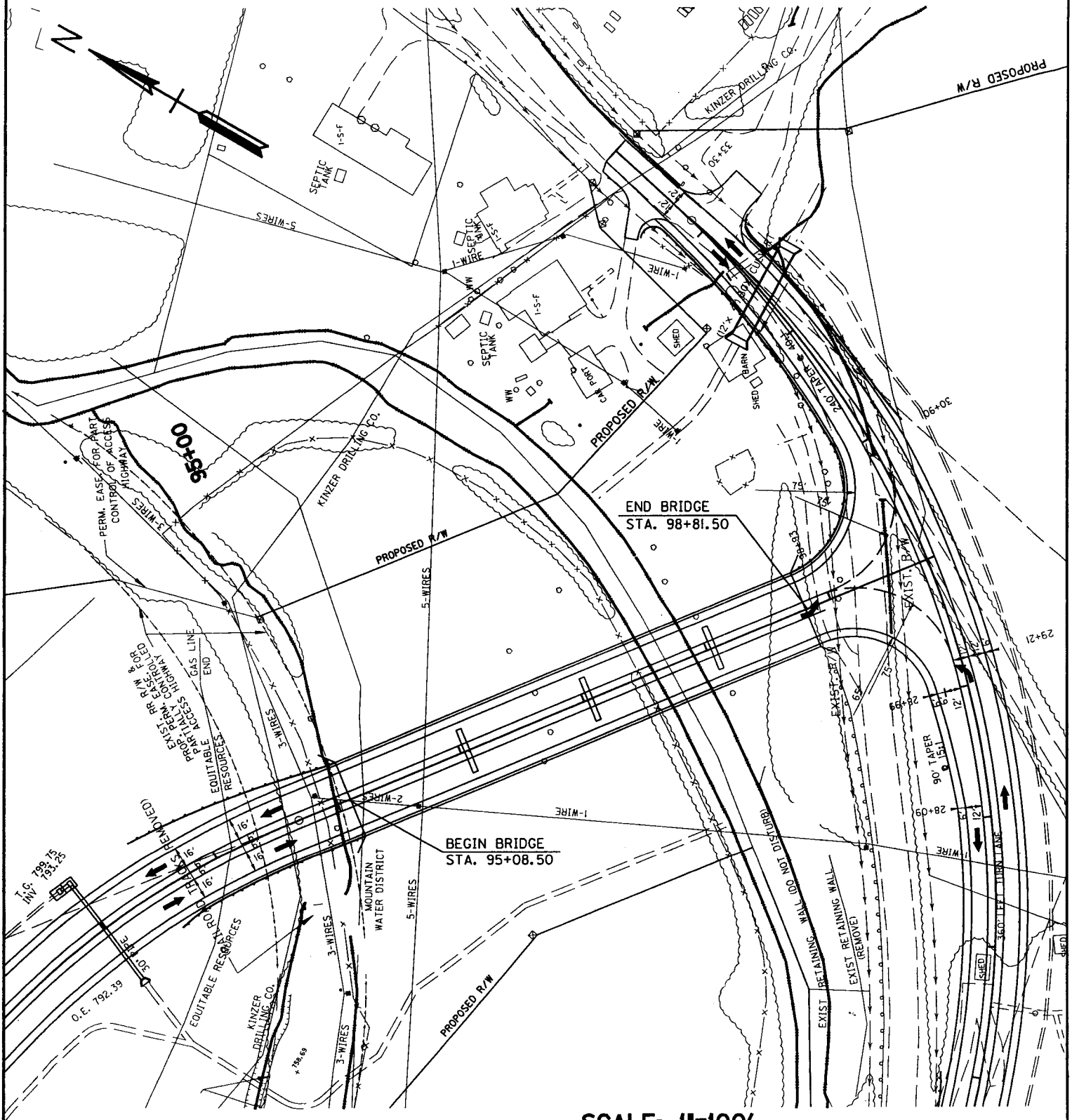
Marrowbone Creek STREAM NAME:	 AT OR NEAR:
Pike COUNTY OF:	KENTUCKY STATE OF:
 MILE POINT:	12-263.50 ITEM NO.:
36 OF 44 SHEET NO.	

DATE: mo. /yr.



SCALE: 1"=50'

~NOTES~	APPLICATION BY KENTUCKY TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS DIVISION OF ENVIRONMENTAL ANALYSIS	Sta. 78+55 Ramp "A" ML Sta. 506+50 - 42" Pipe Const. PROPOSED ACTIVITIES: Marrowbone Creek STREAM NAME: AT OR NEAR: Pike COUNTY OF: KENTUCKY STATE OF: MILE POINT: 12-263.50 ITEM NO.: 37 OF 44 SHEET NO. DATE: mo. /yr.



SCALE: 1"=100'

~NOTES~

APPLICATION BY

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
DIVISION OF
ENVIRONMENTAL ANALYSIS

Ramp to KY 195, Marrowbone Creek Bridge		
PROPOSED ACTIVITIES:		
Marrowbone Creek		
STREAM NAME:	AT OR NEAR:	
Pike	KENTUCKY	
COUNTY OF:	STATE OF:	
	12-263.50	42 OF 44
MILE POINT:	ITEM NO.:	SHEET NO.

DATE: mo. /yr.